

### Bookworld Wholesale Limited

#### UK DISTRIBUTORS OF TANKOGRAD





Modelling Trees Part One
- Broadleaf Trees
92 pages, full colour.
£19.95
£21.95
Modelling Trees Part Two
- Conifers
92 pages, full colour.
£21.95

WHOLESALE TERMS AVAILABLE TO GENUINE OUTLETS IF YOU ARE A PUBLISHER LOOKING FOR A WHOLESALER OR DISTRIBUTOR IN THE UK PLEASE CONTACT US:

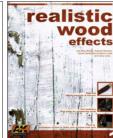




D.A.K Profile Guide D.A.K. Profile Guide This book shows the original German cam-ouflage of vehicles used by the Deutsche Afrika Korps, with color variants throughout the war. 108 pages, Over 170 profiles cover schemes, published by A.K Interactive. £23.99



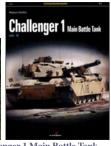
Modelling Grassland and Modelling Grassiand and Landscape Detailing
Featuring Weeds and Wild Flowers, Hedge Roads and Pavements, Mud, Puddles and Rivers by Gordon Gravett. This book is a great follow up, to the two books published on Modelling Trees. Full Colour, 108 page #24 95 £24.95



Realistic Wood Effects eries) in a small format. This collection is oriented to help modelers through different modeling tasks. This volume is dedicated to paint different types of wood, planes, ships, tools, accessories etc. 83 pages, full colour, Published by A.K Interactive. £10.99



Fast Track 01 - M1 A2 Fast IFack 01 - MI AZ SEP V2 Abrams Walkarounds - Exercise photos - Limited Edition: 999 copies Layout as 'In Detail' but half size / half price: 40 pages, 75 large format colour photographs, English text. P10 00



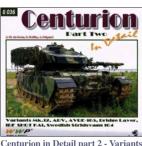
Challenger 1 Main Battle Tank Volume 2 In Challenger 1 Volume 2 Robert Griffin outlines the service career of the Challenger 1 Main Battle Tank and Challenger Repair and Recover Vehicle. This exciting Photosniper title includes numerous period photographs in colour and in black and white, ten colour plates and vehicle plans for the Challenger 1 Mk. 3a sedployed into combat during Operation Granby. 80 pages, 185 photos. £13.99



Tankograd 6032 - U.S. WW II M4A3 Sherman Medium

II M4A3 Sherman Medium Tank 75mm/105mm 48 pages with 150-200 illustrations, among them WW2 action photos, colour photos and technical drawings. Illustrated throughout. Excepts of technical manuals, wartime photos, photos of restored vehi-cles. Ideal companion for modellers and fans of technology. Complete background history and variants. £9,99





Centurion in Detail part 2 - Variants Mk.12, ARV.AVRE-165, Brigade Layer, IDF Shot KAI, Swedish Stridsvagn 104 Published by Wings and Wheels Publications. Paperback, 105 pages, full colour.



Camouflage & Markings of Allied Armor in the Battle for Allied Armor in the Battle for Cassino January-May 1944
This is an authoritative guide to the armor deployed by the Allies over the course of the fighting for this strategic objective. Covering American, British, Indian, Canadian, French, New Zealand and Polish armor, this book in-cludes a number of rare and unpublished photo with detailed captions. 56 pages, 78 bbey photo 20 full color plates of artwork. £19.99



How to Build Airfix 1:24 Hawker Typhoon
The complete guide to building the amazing Airfix 1:24 scale Hawker Typhoon, ing AIITX 1:24 scale Hawker Typnoon, written by Brett Green of HyperScale and Model Military fame. This new book features an exhaustive step-by-step guide to construction with modelling contribu-tions by Brett, Marcus Nicholls and Chris Wauchop. 74 pages, full colour. £12.95



Static Model Manual 7 Static Model Manual 7 - Painting Models, step by step, One Hundred and One Tips This volume, has allowed the publisher to showcase many different high quality techniques Chapters include Paint references Light at our service, Colour theory, Scale effect, Colour modulation, Pre-shading Natural metal finish, Interaction between painting techniques, Oil paints. 73 pages, full colour. £19.99



Tankograd 5050 - Yak - The Yak Armoured Multipurpose Vehicle in Modern German Army Modern German Army
Service The Yak protected multipurpose vehicle is a consequent advancement
of the DURO 3 already used by the
German Bundeswehr. Quantity Photos and
Illustrations: Illustrated with 170 colour
photographs. £13.99



Painting Guide for AFV of World War Two and Modern Era Much more than a arwited in the control of the contro catching 'look. 82 pages, full colour. £17.50



MMIR 61. The MI03, a Primer: Part One. B Beautiful Bofors, Times Two: Looking at the APV Club kis. \*Get your Goat: The Tamiya Gama-Goat. \*Ma.K' ni tu pa st go: Building Wave's Ketzer. H.-B. Go-Go-Go-The Return of the Smart Kit. \*Patton, pathologistly Dragon's MASA.3. \*Thilling Drilling: APV Club's Sd Kfz. 251/21 Ausf. D "Drilling." Great Leapin' Leopard: Meng's Leopard 1
 A3/A4. • Model Citizen: 29th Infantry Division Bar Gunner. Eighty pages. \$8.99



Tankograd 6031 - U.S. WW II Dodge WC51-WC52 Weapons Carrier 48 pages with 150-200 illustra-tions, among them WW2 action photos, colour photos and technical drawings. colour protes and ectimical davings.

Illustrated throughout. Excepts of technical manuals, wartime photos, photos of restored vehicles. Ideal compagnion for modellers and fans of technology. Complete background history and variants. £9.99



Nuts and Bolts 32 - The medium cross-country Lorries 3 ton (6x4) of the Reichswehr and Wehrmacht To date, Nuts & Bolts has only produced publications on tracked, half-track vehicles and weapon systems. With this volume, the first issue in a series which will deal exclusively on Lories - in particular the medium cross-country Lorries (commercial) - m. gl. Lkw. (o) - of the Reichswehr and Wehrmacht. 225 pages, 16 camouflage schemes, 471 photos. £25.15



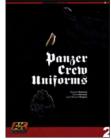
Israeli Wild & Cruel Cats Volume 5 - Namer -Merkava-Based Heavy APC This is the fifth volume in the Israeli Wild and Cruel Cats series which covers the tank-based combat vehicles and armored personnel combat vehicles and armored personnel carriers in service with the Israeli Defense Force. 80 pages in full color, more than 300 color photos, dozens of unique and previously unpublished photos, In-action photos, Walkaround photos, Tactical markings. £29.99



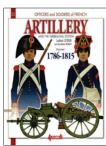
Panzer Wrecks Volume 16 - Bulge By Lee Archer and William Auerbach. Features Subterfuge-Allied or German, Mauled in Marnach, Wrecks at Celles. Paperback, 96 pages, Illustrated with Black and



Tank Art 3 - Modern Armor By Michael Rinaldi, 224-pages, 6 full models, 3 technique chapters, Guest author chapter from Russian armor spe-cialist Andy Taylor and his superb MTLB - (never before published!) New cover design, paper stock and matt lamination soft feel (better durability). £20.99



AK Learning Series Panzer Crew Uniforms
In this book, we find many painting
articles with an extensive step guide and many full colour photographs. A detailed guide on how to paint these uniforms from the classic black uniform to camouflaged clothes and going through the painting of several heads. £10.99



Officers and Soldiers 25 -Artillery 1786-1815 and the Gribeauwal System Volume 1 Ludovic LETRUN, Jean-Marie MONGIN in the Middle Ages, the term 'Artillery' meant 'all the machines that an Army makes use of.' The Artillery Corps of the time was therefore made up of officers whose job it was to create, use and maintain these machines. 82 pages, full colour. £17.50



The Weathering Magazine 8 This time focused on the Vietnam War. Inside This time focused on the Vietnam War. Inside you will find how to create a jungle diorama, how to obtain the characteristic earth and dust colors of Vietnam, and realistic painting of helicopters and airplanes as seen in the war. This, and so much more. So much, that the magazine includes 8 bonus pages full of tricks and techniques to over the topic in depth and have even more fun. \$8.99



Tankograd 3022 -M60A2, M60A3, AVLB The M60A2/M60A3/M60A3 TTS MBTs and the M60A1 AVLB in Service with the US Army Up till the 1980s, the M60 MBT formed the backbone of armoured units of the US Army, Army National Guard and US Marine Corps, ... Sumu and US Marine Co 107 colour photographs, 64 pages. £13.99

#### Bookworld Wholesale Ltd. Unit 10 Hodfar Road, Sandy Lane Ind Est, Stourport, Words DY139QB

Tel: 01299 823330 Fax: 01299 829970

web: www.bookworldws.co.uk email: info@bookworldws.co.uk

YOU CAN VISIT OUR WEBSITE: www.bookworldws.co.uk Stockists of the following subjects: Aviation, Military, Naval, Modelling, Railway, Motoring Major credit cards accepted, UK cheques payable to Bookworld Wholesale Ltd UK POSTAGE SINGLE BOOK £2.50 TWO OR MORE BOOKS £4.50 OVERSEAS AIRMAIL PLEASE ADD 15% OF ORDER VALUE MINIMUM £7.50



# Contents - Issue 102 October 2014









#### **REGULARS**

#### p 4 NEWS

What's new in the world of military modelling

#### p 56 INCOMING

MMI's thoughts on the latest kits and accessories

#### p 58 1:48 SCALE

Luke Pitt explores 1:48 scale military models, figures and accessories

#### **p 60 BOOKS**

Roundup of the latest modelling and reference titles

#### p 66 LAST POST

Late breaking news and ramblings from the Editor

#### **FEATURES**

#### p 6 THINK TANK

T-64 by Zack Sex

#### p 14 ARMOURED REVOLUTION

Trumpeter 1:35 T-64A Mod 1981 by Brett Green

#### p 24 PREVIEW

Dragon 1:35 Sd.Kfz.10

#### p 26 FALL WEISS

Kamil Feliks Sztarbala builds a Panzer II Ausf. C and a Polish wz.34-II armoured car

#### p 40 PREVIEW

Italeri 1:35 LCM

#### **p 42 JAPANESE CLAWED MONSTER**

Scratch built 1:35 SS-Ki Combat Engineering Vehicle by Harvey Low

#### p 50 SHOW REPORT

Tankfest 2014

42



#### ©ADH Publishing Ltd 2014

Tel: (UK) 01525 222573 Fax: (UK) 01525 222574

Email: enquiries@modelmilitary.com

Address: ADH Publishing,

Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, UK

Model Military International is published monthly by ADH Publishing. Reproduction in part or whole of any text, photograph or illustration without written permission from the publisher is strictly prohibited. While due care is taken to ensure the contents of Model Military International is accurate, the publishers and printers cannot accept liability for errors or omissions. ISSN 1749-8864

MMI Newsdesk, ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, UK Tel:01525 222573 Fax:01525 222574 Email:editor@modelmilitary.com







# Australian Bushmaster Field Upgrade

ustralian Bushmaster Protected Mobility Vehicles (PMV) in Afghanistan had their protection improved during a July in-theatre upgrade by a Defence Materiel Organisation (DMO) team.

A four-man PMV Upgrade Program team completed the enhancements over a six-week period.

Team Leader, Major Craig Byrne, said the upgrades bolstered force protection against a range of threats in the Afghan environment and would provide longterm safety without impacting the capability of the Bushmaster.

"These upgrades have been applied to all PMVs used in Afghanistan as well as reserve vehicles. In all, twenty-six vehicles have been upgraded so far

with more than 100 specialised parts installed", "The upgrades are the result of significant

research and development and from feedback from personnel in theatre over recent years.

"In simple terms, we are providing 'bolt on' solutions from our lessons learned and will build further on this machine's fine reputation.

"I have no doubt these upgrades will improve safety for personnel in theatre for everything from Improvised Explosive Devices to direct fire."

The team included chief technical advisors to the PMV Upgrade Program, vehicle mechanic Geoff Molles. fitter Greg Tatt and inventory manager Damien Miley.

Each upgrade package took about two days to complete on each vehicle.



#### NEW 1:35 AMX-30B2 COMING FROM MENG MODEL

Meng has announced a new 1:35 scale AMX-30B2 as their next armour release.

This new 1:35 scale kit is 271mm in total length and 96mm in width. The model represents the cast turret with a partial turret interior; the main gun and 20mm autocannon can elevate independently; the hatch on commander cupola can rotate 360 degrees; realistic running gear parts on the chassis and torsion bar suspension are movable; workable track links are easy to assemble with the assembly jig.

The kit comprises 14 sprues and 2 photo-etched frets. Thanks to Meng Model for the information and images www.meng-model.com





#### NEW FROM AMPERSAND PUBLISHING

Ampersand Publishing has several new releases:

Allied-Axis AA 31

Panzer-Abteilung 40 in Finland- 61 Page Super

Feature! Loads of early Panzer action. 5cm PAK 38-16 Pages! 7.5cm le.IG 18 Infantry Gun- 16 Pages 96 Pages \$15.95 Plus Shipping



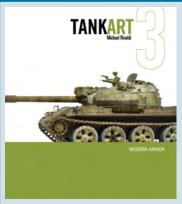
Allied Axis 4 Issue Subscriptions only \$60.95\* \*U.S. Subscription Price. Canada is \$75.95, International is \$105.00

#### The Big Macks A Visual History

of the Mack Wheeled Prime Movers In U.S. Army Service 1940-1958. 112 pages with over 180 black and white photos.



Thanks to Ampersand Publishing for the information and images ampersandpubco.com



#### TANKART 3 MODERN ARMOR - AVAILABLE NOW

Rinaldi Studio Press has announced the release of its third title in the ongoing and TANKART painting and weathering how-to book series -- TANKART 3 Modern Armor. TA3 updates the series with new graphics, more models, plus the latest painting and weathering techniques illustrated with over 500 large and high-quality photos. Combine that with the unique dual text format, which explains in easy-to-understand conversations both the how and the why of each step, and dives into the head of the author to further explain the processes to create world class armor model finishes.

8.5" x 9.5" expanded to 224 pages, equipped with a special Lay-Flat Binding that keeps the book flat and open on the bench now wrapped in heavier cover stock with new soft touch matt lamination. Inside you will find a heavily revised technique chapters showcasing the use of Oil Paint Rendering in conjunction with Hairspray chipping technique in a new combined process approach to create even more original finishes, in addition to 6 full model chapters covering a wide range of subjects and kits, and the guest author is Russian armor specialist Andy Taylor from the UK with his impressive super-detailed MT-LB model.

In-stock and shipping now: \$35USD + shipping. Available direct from www.rinaldistudiopress.com



# Saturday 8th & Sunday 9th November



## The World's Greatest Model Show!

Presented by

Open: Saturday 8th 10.00am to 6.00pm

**Sunday 9th** 10.00am to 4.00pm

Admission: IPMS Members FREE Adults £10.00 each day
2 Day Pass £15.00 Concessions £7.00 per day Children under 16 FREE

Venue: The International Centre Telford Shropshire TF1 4JH

Venue: The International Centre Telford Shropshire TF1 4JH





# T-64 WALK AROUND

#### Zack Sex brings us a series of images of a mid-production T-64 from Kubinka tank museum on the outskirts of Moscow, which he visited in 2012.

he T-64 is a Soviet main battle tank introduced in the early 1960s. It was a more advanced counterpart to the T-62; the T-64 served tank divisions, while the T-62 supported infantry in motor rifle divisions. Although the T-62 and the famous T-72 would see much wider use and generally more development, it was the T-64 that formed the basis of more modern Soviet tank designs, such as the T-80.

The T-64 was conceived in Kharkiv, Ukraine as the nextgeneration main battle tank by Alexander A. Morozov, the designer of the T-54 which, in the meantime, would be incrementally improved by Leonid N. Kartsev's Nizhny Tagil bureau, by the models T-54A, T-54B, T-55, and T-55A.

A revolutionary feature of the T-64 is the incorporation of an

automatic loader for its 125-mm gun, allowing one crew member's position to be omitted and helping to keep the size and weight of the tank down. Tank troopers would joke that the designers had finally caught up with their unofficial hymn, Three Tankers - the song had been written to commemorate the crewmen fighting in the Battle of Khalkhin Gol, in 3-man BT-5 tanks in 1939.

The T-64 also pioneered other Soviet tank technology: the T-64A model of 1967 introduced the 125-mm smooth-bore gun, and the T-64B of 1976 would be able to fire a guided anti-tank missile through its gun barrel.

The T-64 design was further developed as the gas turbinepowered T-80 main battle tank. The turret of the T-64B would be used in the improved T-80U and T-80UD, and an advanced version of its diesel engine would power the T-80UD and T-84 tanks built in the Ukraine.

The T-64 would only be used by the Soviet Army and never exported, unlike the T-54/55. It was superior to these tanks in most qualitative terms, until the introduction of the T-72B model in 1985. The tank equipped elite and regular formations in Eastern Europe and elsewhere, the T-64A model being first deployed with East Germany's Group of Soviet Forces in Germany (GSFG) in 1976, and some time later in Hungary's Southern Group of Forces (SFG). By 1981, the improved T-64B began to be deployed in East Germany and later in Hungary. While it was believed that the T-64 was "only" reserved for elite units, it was also used by much lower "non-ready formations", for example, the Odessa Military

District's 14th Army.

With the break-up of the Soviet Union in 1991, T-64 tanks remained in the arsenals of the constituent republics. Currently, slightly fewer than 2,000 of the old Soviet inventory of T-64 tanks are in service with the military of Ukraine and about 4,000 are outof-service and awaiting destruction in Russia.\*

Despite the large number of T-64 tanks, no examples of T-64 variants are to be found in Western museums.

These photos should be of benefit to any modeller considering tackling on of the many T-64 variants offered by Trumpeter. ■

\*Historical summary courtesy of Wikipedia http://en.wikipedia.org/ wiki/T-64



Detail shot of the distinctive T-64 road wheel. These cast steel road wheels are what tell the T-64 instantly apart from other Soviet cold war MBT of that style. These road wheels can also be found on the BAT-2 and various T-64 based carriers.



Detail shot of the front glacis plate with "V" type splash board that provides some protection for the driver when travelling through mud and water.



The pressed steel mudguard of the T-64 its ribbed form so familiar to all the T-series tanks from the T-54 onwards.



Detail shot of the right hand side turret showing a stowage box and Tucha 81mm smoke launchers sets



A clear view of the rear engine deck of the T-64. This covers the GDTF power pack, which for its day was an extremely advanced and complex design.



Rear view of the T-64 turret showing its rear stowage box and snorkel tube assembly. These fittings have been standard on all post war Russian tanks as the capacity to cross European rivers was viewed a necessary function of these MBTs.



Detail shot of the rear stowage bin, its pressed metal form and clip hinges. Above, notice the weld seams on the snorkel tube assembly



Top shot of a rear side fuel cell pannier. Like the T-55 and T-62 before it the T-64 fuel cells are carried on the side running boards. The looped metal hooks attached to the fuel cell are to for carrying a tow cable.



# Think Tank - T-64 WALK AROUND



Close-up of the rear left hand side T-64 turret. In evidence are the spare track links and below these fittings that according to a Kubinka staff member are used to attach the tank to a train transport. Also of note are the fuel connections from the side fuel cells into the upper hull.



Rear detail shot of the IBII cross wind sensor unit. Of note is the small red formation light attached to the rear.



Top shot of a rear side fuel cell pannier. Like the T-55 and T-62 before it, the T-64 fuel cells are carried on the side running boards.



Top shot of the rear engine deck showing the diesel drum attachment points and hinged section which allows access to the **6DTF** multi-fuel engine.



Good side profile image of the IBH cross wind sensor unit. This device is found on all T-64 variants and also on some T-80s.



mander's periscopic sights and two a for the turret mounted NSVT 12.7 mm machine gun.



Detail shot of the fabric mantlet cover over the I25mm main gun.



Detail shot of the main gun sighting unit and its pressed metal light



Top shot of the loader's hatch. Of note is the similarity to the T-72 hatch, which has a similar hinged portal in the centre.



Detail shot of the distinctive T-64 rear engine cap found to the rear of the turret. Of note are the lifting eyes.



Detail shot of the Commander's hatch. Of note are the built in periscopic sights.



Top shot of the front right hand side upper hull section. In view is the wiring connections for the Tucha 81mm 902A smoke grenade launcher units, one fuel filler cap found to the right hand side of the driver's station and the driver's hatch similar to that found on the T-72.



Top shot of the small stowage box on the side of the mid production T-64. Of note is the empty fitting used to house the laser range finding unit mounted on this vehicle.



Detail shot of the turret positioned NSVT 12.7mm machine gun mountings, which usually contain a large ammo box that slots into the tray to the fore. This unit is also found on the Russian T-55 based BMR 2 mine clearing vehicle.



the driver's position and protective splash guard. Of note are the upper KMT attachment point for mine rollers and mine ploughs.

Top shot of



'Europe's Number One Model Shops'

#### www.hannants.co.uk





AB3567

1:35 WWII British Airborne Weapon & Equipment Set £22.50



CB35065 1:35 Pz.kpfw.35(t)in co-operation with SKP Model £31.99



ZB48004 1:48 Russian Self-Propelled Gun SU-152 (KV-14) March 1943 Production





1:35 Universal Carrier Mk.II with full Interior £29.99

RV35027

#### **H.G.Hannant Ltd,**

Harbour Road, Oulton Broad, Lowestoft, Suffolk, NR32 3LZ, England.

Open from 09.00 to 17.30 Monday to Saturday.

Phone: 00 44 (0)1502 517444 (8 lines) 0845 130 72 48 local rate from UK phones only (NOT mobiles) Fax: 00 44 (0)1502 500521

E-Mail: sales@hannants.co.uk Web Site: www.hannants.co.uk

To join our mailing list so you receive our free weekly email news letter please use this link: www.hannants.co.uk/cgi-bin/mailinglist.pl

# Think Tank - T-64 WALK AROUND



Useful shot of the worn and crumpled tarpaulin cover above the 125mm gun mantlet.



Detail shot of the main gun sighting unit and its pressed metal light guard. To the front left is found the infrared lamp.



Detail shot of the main gun sighting unit and its pressed metal light



Front three-quarter view of the T-64 wearing its attractive three colour camouflage scheme.



Side profile of the T-64 showing to good effect its distinctive road wheels and low silhouette.



Front three-quarter view of the T-64 showing the smooth-bore 125mm main gun.







Close up shot of the T-64 rear hull showing the large left hand side hinge unit for the engine deck cover, the air intake unit and spare diesel drum attachments.



Detail shot of the turret showing the spare tracks and railway transport attachment points.



Side view of the T-64. Of note is the spare gearbox sitting on a pallet to the side and the T-72 recovery vehicle in the background.



# Retail Shop Open Mon-Sat 9.30am-5.30pm (Closed Wednesdays) the Eduard specialists

#### TELEPHONE: 01273 705420 MOBILE: 07973 551470

£30.99 £29.99 £18.99 £29.99 £32.99 £27.99 £24.99 .... £TBA £31.99

TAKOM	011 1070
TAK2001	Object 279£49.99
TAK2003	Cana Leopard C2 Mexas£48.00
TAK2004	Leopard 1A5/C2£TBA
TAK2005	German Civil Car w/Rocket£26.99
TAK2006	Super Heavy KV-5£49.99
TAK2007	Japanese S.U.V£TBA
TAK2008	WWI Mark IV Male £49.99
TAK2009	WWI Mark IV Female C40.00
TAK2011	WWI Mark IV Female
TAK2011	CA Chamand Late CTDA
IAKZUIZ	St Chamond Late£TBA
	L KIMO
DRAGON	
D3546	M-48A3£49.99
D6375	Pz IV Crew£13.25
D6387	Pz III Ausf L Late£49.99
D6695	German Wehr Bivouac £16.99
D6732	SdKfz 10 Ausf A W/5cm Pak 38£49.99
D75048	1/6 Sherman Ic Firefly Hybrid£499.99
D3548	M103 A1 Heavy Tank£49.99
D3550	MBT 70 [KPZ 70]£49.99
D6789	M6 A1 Heavy Tank
D6578	Stug III Ausf G 1943£49.99
D6792	Panzer III Ausf F command£49.99
D6793	Sexton II Late Prod Cannuk£39.99
D6796	ISU-152£49.99
D3554	Saladin Armoured Car Mkll£TBA
TAMIYA	
32407	LRDG w/Masterbox figs£25.99
35336	GPA Jeep Updated w/figs £19.99
37015	Linesh Vis 15 w/fire (or lie)
30057	Horch Kfz 15 w/figs (ex Ita)£29.99
	WWI Mark IV Tank w/figures£49.99
25174	1/35 British Sherman VC Firefly & 6 figs£37.99
25175	1/35 Sherman Easy 8 & 4 figures£37.99
30057	1/35 WWI British Mk IV Tank Male£49.99
31713	1/700 CV-3 Saratoga Aircraft Carrier£34.99
32408	1/35 Pak 36r North Africa Set£24.99
32582	1/48 British M10 IIC Achilles£16.50
35339	1/35 WWI British Infantry Set x 5 figs£10.50
55005	., 55 2 210.00
ICM MOI	nEl C
RIC35401	Type 2.5-3.2T Light truck£24.50
	Type 2.3-3.21 Light Huck
RIC35402	Type 2.5-32 Shelter£TBA
RIC35403	Type 25-32 K&S8£TBA
RIC35414	V3000S/SS Maultier
RIC35416	Lastkraftwagen 3.5 AHN£TBA
RIC35477	Kapitan Saloon£TBA
RIC35480	Kadett K38 Saloon£TBA
RIC35515	Zii-131 Truck £TBA
RIC35526	L1500s German Fire Engine £24.50
RIC35534	Type 770K Open Top
	Packard Twelve series 1408£24.50
RIC35536	UNUI Comes Firemen
RIC35632	WWII German Firemen£7.99
RIC35671	WWI Austro/Hun Weapons£7.99
RIC35674	Russian Maxim M/Gun (1910)£7.99
RIC35675	Russian Maxim M/Gun (1930)£7.99
	1/24th Admiral Cabrio£29.99
RIC24021	
RIC24021 RIC24022	1/24th Admiral Cabrio w/hood£29.99

TM05515	9P148 ATGM	
TM05522	T-64BV model 1985	£39.99
TM05557	PLA Type 86A I.F.V	£27.99
TM05565	T-80B	£44.99
TM05572	JGSDF Type 73 Light Truck	£24.99
TM05573	IS-4 Soviet Heavy Tank	£54.99
TM05575	Soviet Project 704 SPH	£54.99
TM05581	T-80BVD	£59.99
TM05582	T-80BVDRussian TOS-1 24 BMRL	£57.99
TM05583	S-51 S/P Gun	£39.99
TM01014	BM-21 Grad late	£37.99
TM01533	BMP-3 North Korea	£29.99
TM01592	German SPW-70	£31.99
TM	RMPT Ramka	£TRA
TM	Russian T-35 Heavy Tank	£TBA
TM	Russian T-28 Medium Tank	£TBA
TM	Russian Ba-10 A/car	£TBA
TM03706	USS Iowa BB-61 1/200th	£279.99
TM05327	USS Indianapolis CA-35 1944	£49.99
TM03619	PLAN Type 051c DDG	£89.99
TM04547	PLAN Type 051c DDGHMS Monmouth Type 23	£39.99
	<b>*</b>	
<b>BRONCO</b>	MODELS	
BM35065	Pz 35T	£31.99
	Pz 35T	£31.99 £TBA
BM35065	Pz 35T	£31.99 £TBA £26.99
BM35065 BM35124	Pz 35T	£TBA £26.99
BM35065 BM35124 BM35125 BM35142 BM35143	Pz 35T	£TBA £26.99 £TBA £31.99
BM35065 BM35124 BM35125 BM35142	Pz 35T 8 Rad PzFunkWg SdKtz 263 CV3/33 Tankette series II early. 4x4 MRAP Maxx. Panzer 1 Aust F (VK1801) Buffalo 6x6 w/slat armour/spaced	£TBA £26.99 £TBA £31.99 £TBA
BM35065 BM35124 BM35125 BM35142 BM35143	Pr. 35T  Rad PzFunkWg SdKfz 263  CV3/33 Tankette series II early 4x4 MRJR Maxx  Panzer 1 Aust F (VK1801)  Buffalo fx6 w/stat armour/spaced  1/4 Truck w/Strimm Airborne flow	£TBA £26.99 £TBA £31.99 £TBA
BM35065 BM35124 BM35125 BM35142 BM35143 BM35145	Pr. 35T  Rad PzFunkWg SdKfz 263  CV3/33 Tankette series II early 4x4 MRJR Maxx  Panzer 1 Aust F (VK1801)  Buffalo fx6 w/stat armour/spaced  1/4 Truck w/Strimm Airborne flow	£TBA £26.99 £TBA £31.99 £TBA
BM35065 BM35124 BM35125 BM35142 BM35143 BM35145 BM35163	Pr. 35T  Rad PzFunkWg SdKfz 263  CV3/33 Tankette series II early 4x4 MRJR Maxx  Panzer 1 Aust F (VK1801)  Buffalo fx6 w/stat armour/spaced  1/4 Truck w/Strimm Airborne flow	£TBA £26.99 £TBA £31.99 £TBA
BM35065 BM35124 BM35125 BM35142 BM35143 BM35145 BM35163 BM35175	Pr. SST ST STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED	£TBA £26.99 £TBA £31.99 £TBA £TBA £TBA £TBA £TBA
BM35065 BM35124 BM35125 BM35142 BM35143 BM35145 BM35163 BM35175 BM35188	Pr. 35T BAR PFunkWg SdKtz 283 CV3:33 Tankette series II early 444 MRAP Maxx Parazer 1 Aust F (WK1001) Buffalo baf wistal amourispaced 11/41 Tuck w/Toma Airborne How German Horch Early Loyd Carrier no 2 Mk II w/6 Pdr Gun A. 55 H Norsa Mk1 TYPEZ Track kinks (MA8/60)	£TBA £26.99 £TBA £31.99 £TBA £TBA £TBA £TBA £TBA £TBA £TBA
BM35065 BM35124 BM35125 BM35142 BM35143 BM35145 BM35163 BM35175 BM35188 BM35195	Pr. 25T ST STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED SI	£TBA £26.99 £TBA £31.99 £TBA £TBA £TBA £TBA £TBA £TBA £TBA
BM35065 BM35124 BM35125 BM35142 BM35142 BM35145 BM35145 BM35163 BM35175 BM35188 BM35195 AB3563	Pr. 35T A SHAP SHAP SHAP SHAP SHAP SHAP SHAP SH	£TBA £26.99 £TBA £31.99 £TBA £TBA £TBA £TBA £TBA £TBA £TBA £TBA £TBA
BM35065 BM35124 BM35125 BM35142 BM35142 BM35143 BM35163 BM35163 BM35175 BM35188 BM35195 AB3563 AB3564	Pr. 35T A SHAP SHAP SHAP SHAP SHAP SHAP SHAP SH	£TBA £26.99 £TBA £31.99 £TBA £TBA £TBA £TBA £TBA £TBA £TBA £TBA £TBA
BM35065 BM35124 BM35125 BM35142 BM35143 BM35143 BM35163 BM35175 BM35188 BM35195 AB3563 AB3563 AB3564 AB3565	Pr. 25T ST STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED STANDARD SIGNED SI	£TBA £26.99 £TBA £31.99 £TBA £TBA £TBA £TBA £TBA £TBA £TBA £TBA
BM35065 BM35124 BM35125 BM35142 BM35143 BM35145 BM35163 BM35175 BM35188 BM35195 AB3563 AB3563 AB3564 AB3565 AB3566 AB3567	Pz SST Rad PrünkWg SdKtz 263 CV3/33 Sankette series II early. 424 MRAP Mexx. Panzer 1 Ausf F (VK1801) Butfalo 656 wistla armour/spaced 1/4T Truck w/75mm Airborne How German Horch Early. Lloyd Carrier no 2 Mk II w/6 Pdr Gun. A. S S1 Hors akl Mkl. 1972 Track links (Mkl/800) Soviel BT-7 Track 1-00ET Sleel Track Mc5/45 1-40ET Sleel Track Mc5/45 1-44ET Rubber Track Md6/47. WWII Weapons/Equipment.	£TBA £26.99 £TBA £31.99 £TBA £TBA £TBA £TBA £TBA £TBA £TBA £TBA
BM35065 BM35124 BM35125 BM35142 BM35142 BM35143 BM35163 BM35175 BM35188 BM35188 BM35195 AB3563 AB3564 AB3565 AB3566 AB3567	Pr. 35T	ETBA  E26.99  E1BA  E31.99  ETBA  E1BA  ETBA  ETBA
BM35065 BM35124 BM35124 BM35124 BM35142 BM35143 BBM35143 BBM35163 BM35175 BM35188 BM35195 AB3564 AB3566 AB3566 AB3567 WINI ART UMA35102	Pz SST	ETBA  226.99 ETBA E31.99 ETBA ETBA ETBA ETBA ETBA ETBA ETBA ETBA
BM35065 BM35124 BM35124 BM35142 BM35142 BM35143 BM35143 BM35153 BM35178 BM35178 BM35178 BM3518 AB3564 AB3566 AB3566 AB3567 MINI ART UMA35102 UMA35102 UMA35102	Pr. 25T As a Ball Primit Wig Sidkiz 263 CV3/33 Tankelle series II early. 424 MRAP Maxx. Panzer 1 Aus F (VK1801) Spaced Buffallo 65 Wistla armout/spaced 1/41 Truck w 75mm Alforone How German Horch Early Luyd Carrier no 2 Mk II w/6 Pdr Gun. A. S S Horsa Mikl Type Track Miklory Type Track Kinkis (MA/60) Soviet BF-7 Track T-DelCF Sided Track MZ6/46 T-844F Rubber Track M6/47 WWII Weapons/Equipment	ETBA
BM35065 BM35124 BM35124 BM35124 BM35143 BM35143 BM35143 BM35163 BM35163 BM35195 AB3564 AB3566 AB3566 AB3567 MINI ART UMA35102 UMA35102	Pz SST	ETBA
BM35065 BM35124 BM35124 BM35142 BM35143 BM35143 BM35163 BM35163 BM35188 BM35188 BM35188 BM35184 BM3564 AB3564 AB3565 AB3667 MINI ART UMA35102 UMA35144 UMA35144 UMA35194	Pr. 25T Band Primit Wig Sidit 263 CW333 Statette series II early. 444 MIRAP Marx. Patzer 1 Ausf F (WK1907) Butfalo 6 Wista armour spaced 1/47 Truck w/ 75mm Arborne How German Horch Early Luyd Carrier no 2 ffk II w/5 Pdr Gun. A. S.5 H Ibras a Ilkil 1972 Track Ilkil 1974 Track VIII 1	ETBA E26.99 ETBA E31.99 ETBA ETBA ETBA ETBA ETBA ETBA ETBA ETBA
BM35065 BM35124 BM35124 BM35124 BM35143 BM35143 BM35143 BM35163 BM35163 BM35195 AB3564 AB3566 AB3566 AB3567 MINI ART UMA35102 UMA35102	Pz SST	ETBA E26.99 ETBA E31.99 ETBA ETBA ETBA ETBA ETBA ETBA ETBA ETBA

UNINGGIUI	0.9 01116619	
UMA35162	Panzer III Ausf B	£TBA
UMA35166	Panzer III Ausf C	£TBA
UMA35168	U/S MP w/motorcycle	£TBA
UMA35169	Panzer III Ausf D	£TBA
UMA35171	Fire Truck w/trailer and pump	£TRA
UMA35177	Gaz-AAA W/Quad Maxim	CTRA
UMA35180	US Drivers	CTRA
UMA38003	European Tram 641	
UMA38004	French Civilians 30/40's	
	Para with Trans Line	L0.93
UMA36057	Base with Tram Line	£15.99
UMA36058	Zis-3 Gun Emplacement	£1BA
MENG M	ODELS	
SS-004	M2A3 Bradley w/Tusk III	£49 99
SS-006	M3A3 w/Busk III	
TS-006	Russian T-90A MTB	
TS-007	Leopard 1A3/4	
	D-U	
TS-012	PzHaubitze 2000 s/p	£39.99
VS-005	PICK UP W/ZPU-Z	£22.99
SPS-015	Pick Up w/ZPU-2 Modern U.S Personnel Equipment	£7.99
SPS-17	Interior for M3A3 w/busk III	£TBA
AFV CLU	IP.	
AF35S67	AAV7A1 Ram/RS w/EAAK	260 00
AF35236	AEC Matador Early	C40.00
AG35039		
AG35042	Nato 155mm How Ammo	£14.99
	M2HB.50 cal M/G Conv	£7.99
AF35049	AEC Dorchester Early	£1BA
AF35273	AEC A/car Mk III	£1BA
AF35060	M-60A1 Patton	
AF35166	6 Pdr A/T Gun	£TBA
AF35175	M1A1 75mm Pack Howitzer	
AF35202	17 Pdr A/T Gun	£TBA
AF35209	M-24 Chaffee (korea)	239.99
AF35219	6 Pdr Gun Airborne Crew	£TBA
AF35145	T-34/85 Mod 1944/45 Factory No 174 w/Int	£42 99
AF35186	Bofors 40mm FlaK 28 A/A Gun	£29 99
AF35S82	NM-116 (M24 Chaffee)	£TR4
AF35259	Churchill AVRE w/snake launcher	CTRA
AF35270	Bussing NAG L4500a	C43 00
AF35285	Churchill Funnie Carpetlayer	
AF30Z00	CHURCHIII FUIIIIE Carpellayer	£1DA
новву і	BOSS	
HBB82602	1/16th T-34/85	£64 99
HBB83802	US White 666 Cargo soft top	£34 99
HBB83806	French R-35 tank	£26.90
HBB83813	SdKfz 221 Early	228.00
HBB83818	T-37 Early	
HBB83822	Cundish CV0020 ITV	
HBB83824	Swedish ĆV9030 IFV Russian T-30S light tank	£29.99
	ONO COMUNICACIONE DE LA COMUNICACIONE DEL COMUNICACIONE DEL COMUNICACIONE DE LA COMUNICACIONE DEL COMUNICACIONE DE LA COMUNICACIONE DE LA COMUNICACIONE DEL COMUNICACIONE DE LA COMUNICACIONE DE LA COMUNICACIONE DEL COMUNICACIONE DE LA COMUNICACIONE DEL COMUNICACIONE DE LA COMUNICACIONE	£22.99
HBB83830	GMC CCKW 750 Tanker	£34.99
HBB83835	GCT TOOMM AU-FT SPH	£36.99
MERIT N	IODEI S	
MM60030	1/18th German Flak 88 type 36	Cfuturo
MM60602	1/Fib CMCA2	Cfut
MM61601	1/6th SMG431/16th German 105mm K18 Cannon	£iulure
MM61604	1/10th M ATH MDAD	£iulure
IVIIIIO 1004	1/16th M-ATV MRAP	£TUTUre

IM61605	1/16th US Maxx Pro MRAP£future	
1M63502	M-19 soft top w/trailer£future	
IM62001	1/200th USS Hornet CV-8£259.99	
IM64801	1/48th U.S Elco 80' PT Boat Late £69.99	
	1, 1011 010 2100 00 1 1 2011 2110 11111111	
	MODELS	
M64008	1/350th USS Intrepid CV-11£159.99	
RODEN		
R806	R/R 40/50 Silver Ghost£TBA	
R807	Onel Blitz Omnibus W39 £TBA	
11007	Oper bild offillious was	
/ASTER		
1X3208	French Hussar 54mm£9.99	
1X35083	German elite Inf£10.99	
1X35095	Jungle Patrol Vietnam£10.99	
IX35157	South of France 1944	
IX35158	Brit/German soldiers Somme 1916£8.99	
IX35159 IX35160	US Modern w/civilians£TBA German Tankmen WWII£8.99	
1X35163		
1X35165	Middle East figures £8.99	
IX35166	German Military Cycles WWII £TBA Woman w/Bicycle £TBA	
1799100	WUIIIIII W/DICYCIE	
ULCAN		
U56011	British VI North Africa£TBA	
U56004	German Fuel Drums£TBA	
RIICH MO	ODE! S	
V35 ?	M-992 FASV£TBA	
V35019	57mm A/T Gun M2 Carriage early£TBA	
V35020	57mm A/T Gun M2 Carriage late£TBA	
V35021	Livestock set No 3 (dogs)	
V35030	Praga AV Staff car£TBA	
V35033	Air Defence S-125 Neva£TBA	
ANTED	WRECKS / CANFORA BOOKS	
Inrld of Dior	ama's vol 1£23.99	
	the Battlefield£23.99	
anzerwreck	s 17 Normandy 3 (due Sept)£17.00	
uel in the M	ist 3 £36.99	
iger on the I	Battlefield (due Aug)£23.99	
er Tiger 1 V	ol 1 Abt 501 (due Aug)£24.99	
Prices con	rect at time of going to print	
POSTAGE CHARGES (WITHIN UK)		
arge Letter£1.50		
Small Parcel 1kg£3.50		
Small Parcel 2kg £5.00		
Aedium Pa	rcel 1kg £6.50	

www.eduard.com

# ARMOURED REVOLUTION







Trumpeter's box art is not exactly inspiring, but the contents are!



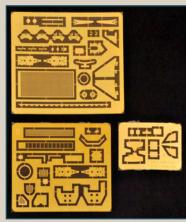
The turret features nicely rendered cast texture.



Link and length tracks are included.



Clear parts are provided for the headlight lenses and driver's scope.



Three photoetched frets are included.



Markings include generic numbers.

he T-64 is a Soviet main battle tank introduced in the early 1960s. It was a more advanced counterpart to the T-62 - the T-64 served tank divisions, while the T-62 supported infantry in motor rifle divisions. Although the T-62 and the famous T-72 would see much wider use and generally more development, it was the T-64 that formed the basis of more modern Soviet tank designs, such as the T-80.

The T-64 was conceived as the next-generation main battle tank by Alexander A. Morozov, the designer of the T-54 (which, in the meantime, would be incrementally improved by Leonid N. Kartsev's Nizhny Tagil bureau, by the models T-54A, T-54B, T-55, and T-55A).

A revolutionary feature of the T-64 is the incorporation of an automatic loader for its 125-mm gun, allowing one crew member's position to be omitted and helping to keep the size and weight of the tank down. Tank troopers would joke that the designers had finally caught up with their unofficial hymn, Three Tankers – the song had been written to commemorate the crewmen fighting in the Battle of Khalkhin Gol, in 3-man BT-5 tanks in 1939.

The T-64 also pioneered other Soviet tank technology: the T-64A model of 1967 introduced the 125-mm smooth-bore gun, and the T-64B of 1976 would be able to fire a guided anti-tank missile through its gun barrel.

The T-64 design was further

developed as the gas turbinepowered T-80 main battle tank. The turret of the T-64B would be used in the improved T-80U and T-80UD, and an advanced version of its diesel engine would power the T-80UD and T-84 tanks built in the Ukraine.

The T-64 would only be used by the Soviet Army and never exported, unlike the T-54/55. It was superior to these tanks in most qualitative terms, until the introduction of the T-72B model in 1985. The tank equipped elite and regular formations in Eastern Europe and elsewhere, the T-64A model being first deployed with East Germany's Group of Soviet Forces in Germany (GSFG) in 1976, and some time later in Hungary's Southern Group of Forces (SFG).

By 1981, the improved T-64B began to be deployed in East Germany and later in Hungary. While it was believed that the T-64 was "only" reserved for elite units, it was also used by much lower "non-ready formations", for example, the Odessa Military District's 14th Army.

With the break-up of the Soviet Union in 1991, T-64 tanks remained in the arsenals of the constituent republics. Currently, slightly fewer than 2,000 of the old Soviet inventory of T-64 tanks are in service with the military of Ukraine and about 4,000 are outof-service and awaiting destruction in Russia.\*

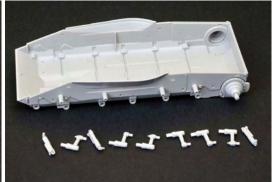
\* Historical summary courtesy of Wikipedia http://en.wikipedia. org/wiki/T-64



The road wheels are supplied in three parts each.



The road wheels and idler wheels assembled and ready for



Torsion bar ends are separate parts.



A handy jig is supplied for bending the mud scraper.



Here is how the scraper should look when bent to shape and attached to its mount.



The scraper fitted to the hull side. It should fit between the halves of the drive sprocket like this.



Suspension and wheels are now all in place. You do need to pay careful attention to the part numbers of the suspension components.



The rear hull. Note the recessed rectangles at the top. These are the mounting points for the unditching log straps.



Front lower hull detail parts have been added here.

#### **TRUMPETER'S 1:35 T-64A MODEL 1981** IN THE BOX

Trumpeter's 1:35 scale T-64A Model 1981 comprises 428 parts in grey plastic for the vehicle itself, another 42 grey plastic parts for the link-and-length tracks, 11 grey flexible parts, seven pieces in clear and three photo-etched frets. Markings are offered for one specific vehicle plus generic white numbers.

Moulding quality is excellent with no imperfections apparent on outer surfaces. Sprue attachments are fairly fine, and only minimal cleanup is required.

I really like the rough cast texture on the turret. Recessed locating marks are also moulded onto the turret showing where the smoke dischargers and lifting hooks should go.

The inclusion of flexible grey parts is a bit unusual. These are for the mantlet cover (two are supplied for different elevations), the engine deck flaps, the spent ammo bag, the unditching beam and the rear mud flaps. Although I think these could have quite adequately moulded in conventional rigid polystyrene, these flexible parts are well presented and certainly do not detract from the overall effect.

Photo-etched parts are offered on three frets for grilles and smaller detail parts.

The axle ends of the torsion bars are separate parts that are keyed to the lower hull, although you could easily modify these if you want to depict the suspension on uneven ground.

The tracks are presented as link and length.

This is a well-detailed and impressive looking kit in the box. Now let's see how it builds up!

#### CONSTRUCTION

Despite the relatively high parts count - well over 500 including the photo-etched parts - I did not find this a particularly taxing build. I started the model on a Wednesday and finished basic construction on the Friday afternoon.

The lower hull and suspension parts went together quickly and before I knew it I was snipping off the link and length tracks. These looked to be very easy, with only 21 parts per side, but they were actually the most fiddly part of the whole build.

The individual links did not really want to sit cleanly between the teeth on the drive sprocket. After a frustrating 15 minutes with the first drive sprocket, I found that these tracks fitted better if I glued together six individual links,



There are only 21 links and track lengths per side, including spares.



I found that the best way for the individual links to fit around the track was to glue five or six links together, wait for 15 minutes for them to partially set...



...then glue them to the drive sprocket. Note that the drive sprockets have not been glued in place, allowing for adjustment and rotation as the tracks are fitted.





The last track in the angled lower front run has been bent to improve fit against the The top track run has been glued to the individual drive sprocket links here.



The rear deck, including those flexible upright flaps.



The main upper hull part with holes drilled and some detail parts already attached.



The main upper hull part glued to the lower hull.



Fenders and fuel tanks awaiting installation.



The side skirts are supplied in one piece each, and both feature realistic



Fit of all the main hull components is excellent.

■ allowed them to partially set for around 15 minutes, and then wrap the still-flexible length around the sprocket.

I used the same method for the idler wheels. In fact, I also cut off the guide horns for most of the links around the idler wheels.

The guide horns were a very tight fit between the wheel halves on the bottom track run. I found that they fitted better when I sanded the spaces between the wheels with folded coarse sandpaper.

The balance of construction was fast and straightforward with only a few exceptions.

The instructions appear to be missing a few parts, although they are included in the kit. They do not mention the photo-etched parts for the unditiching beam mount. I have shown the position of these four photo-etched parts in the accompanying photographs.

Oh, and don't forget to drill out all the holes mentioned in the instructions. I missed a few myself!

#### **MODIFICATIONS**

I deviated from the instructions slightly when it came to turret stowage. Some photos appeared to indicate a different (possibly earlier) stowage configuration with three boxes on the forward left side and no smoke dischargers. I had also found a great photo of an earlier version T-64A on exercise in 1989 slathered in mud and dirt and with a white turret cross.



The completed rear hull with the position of the four photo-etched unditching beam strap mounts seen to good effect. These are not mentioned in the instructions – they just magically appear in one of the



Mr Dissolved Putty might be a funny name, but it works well. The recessed locating points for the smoke dischargers were filled with this and the cast texture restored.



Holes were drilled for the turret stowage per the kit instructions.



The rear deck, including this nicely presented photo-etched mesh.



Detail parts awaiting assembly and painting.



The machine gun mount is a gorgeous little multimedia assembly in its own right.



The completed turret with stowage and detail parts in place.





Tow cable and fittings were added.

The model, almost ready for paint.

I filled the recessed locating marks for the smoke dischargers with Gunze Mr Dissolved Putty, then textured the surface to match the cast effect on the rest of the turret.

I also added a tow cable using the ends in the kit and a length of M Workshop Non-Fuzzy String, stiffened by running the length through a mixture of Gator's Grip Acrylic Glue and water.

Finally, the photo showed the loader's machine gun station with the ammo bin and shell basket in place, but the gun itself absent. I replicated this too.

#### **GOING GREEN**

Following an overall coat of Tamiya Grey Primer, I sprayed the turret and hull glacis with Tamiya White Primer, both straight from the can.

I masked the white turret cross and the extension on the hull glacis with 10mm Tamiya tape, cut down to a width of around 8.5mm.

The tracks, wheels and side skirts were then sprayed with a mixture of "scale black" – a 50/50 blend of Tamiya XF-1 Flat Black and XF-64 Red Brown.

The skirts were masked with Tamiya tape, then the whole model was sprayed with Gunze Mr Color 136 Russian Green (2) Lacquer. When this had dried 15 minutes later, I sprayed a paler top coat from directly above. This was a 50/50 mix of Mr Colour 135 Russian Green (1) and 136 Russian Green (2). I thinned the Mr Color paints with Mr Colour Leveling Thinner 400. This is a retardant as well as a thinner. preventing the lacquer paint from drying at the tip of the airbrush and causing spider webs between the airbrush and the model.

The white markings looked a bit too neat and clean so I brushpainted green roughly along the edges to make them look a bit more "field applied"!

#### **ATOMISING DUST**

I was really pleased with the durable finish of the Mr Color lacquer paints, but the result was pretty vivid. My vehicle was destined to be dusty and muddy, so how to get there from here? I recalled seeing an Internet posting The model received two coats of Tamiya's Grey Primer.

by Adam Wilder where he used a plastic pump action atomiser bottle to mist a mixture of water and pigments over an entire model. I thought that I would give this a try, but using mineral (enamel thinners) turpentine as the thinner instead of water. My theory was that this would result in a more permanent dust coat.

As I had used lacquer paints, I sprayed two generous coats of Tamiya acrylic Flat Clear before applying the oil-based dust coat.

I loaded up the bottle with MIG's P039 Industrial City Dirt pigments and about 90% enamel thinners. The resulting dust effect was okay, although there was a bit of unwanted pooling here and there, and other patches where the dust had not covered at all. I have ordered some smaller plastic bottles to experiment further. Next time I will probably use a higher proportion of pigments.



The white cross on the turret, and the stripe on the glacis, were masked with Tamiya tape.



The side skirts, suspension and tracks were sprayed "scale black".



The skirts were masked with Tamiya tape before camouflage colours





The decals were sourced from Tamiya's venerable T-55 kit as the digits were a closer size to those seen in reference photos, but the decal setting solution melted one of the numbers.



The number was stripped off using tape.



A new number 3 was added, and this time I did not use decal setting



#### **■ MUD AND DETAILS**

It looks like the vehicle in the reference photo has nose-dived into a big patch of mud. The mud is quite thick on the forward glacis and has also dried onto the top of the front mudguards.

I used MIG Mud for the first time for this job. P500 Europe Dry Mud is a nice texture, although I thought the colour was a bit more orange than what I was looking for. I therefore trowelled the mud mixture onto the wheels and the front of the hull, then stippled MIG's P039 Industrial City Dirt pigments over the top. This toned down the colour of the mud mixture and offered more variation to the texture too.

Maru Easy Mud Item No. 21105 European Earth was brushed onto higher areas where I wanted less texture.

The unditching beam was painted at this stage. After a coat of Tamiya Grey Primer from the spray can, the beam was brush painted with Vallejo Panzer Aces acrylic No. 310, Old Wood. I drybrushed the painted log with Tamiya acrylic XF-57 Buff against the grain.

When dry, the entire beam was brushed with a generous coat

of MIG Productions' P225 Wood Ageing Solution This settled nicely in the low points, resulting in a realistic outer grain. The ends of the log were stippled with Buff and Old Wood to suggest a freshly cut surface.

#### **ROLL OUT THE BARREL(S)**

As a foil for the relentless green, I thought that I would paint one of the spare fuel drums in civilian colours.

One barrel was primed white and the other grey. The middle section of the white barrel was masked with Tamiya tape, then the rest was sprayed a mixture of Tamiya X-14 Sky Blue and XF-2 White.

The second barrel was painted green then both were sprayed with MIG Productions' Absolute Chipping solution. This is an "official modelling product" substitute for hairspray, although hairspray would have worked too.

Both barrels were now sprayed with a thin dark rusty mixture of XF-1 Flat Black and XF-64 Red Brown.

Once this was dry, I used a damp stiff brush to start scrubbing the rusty top coat, revealing the lighter colours beneath but retaining some of the rusty residue.

Details including the retaining straps were now picked out with acrylic paints and a fine brush, and the barrels were glued to the model.











**Graham Tetley** examines the latest in Dragon's Demag family.

vehicle is several guises previously, but now DML has offered the Ausf. A combined with their previously released 5 cm PaK 38 antitank gun. What is different about this release is that the halftrack now comes with a larger fret of etched brass and a folded top, and the PaK 38 includes eight four-round ammunition canisters.

The Ausf. A uses many of the previous Sd.Kfz. 10/5 sprues with the replacement of the running gear from the Sd.Kfz. 250 kits. Moulding is clean and crisp throughout and there is a choice of the two part tyres or the fivepart ones from the later 250 kits in the box. The new body comes in multiple parts with the new working sides & seat backs on Sprue F. The etch that is exclusive to this release comes on two frets and includes mudguards, mounts for the radios, straps for the new ammo canisters and a little 'DEMAC' nameplate - I guess the lawyers got to that one!

The Pak 38 is a very nice kit in its own right but, being an older release, detail is not as fine or abundant as on the half-track. It would have benefitted from some brass - especially a new gun shield, but it will do the job out of the box.

Four decal options are provided, all for the Eastern Front, plus we have four masks provided for the clear windscreen - a nice touch.

their exquisite Magic Track links of two parts each. Whilst they are nicely done and accurate, some may find them tedious to assemble but I personally love them. They are far better than the flash-addled DS Tracks that Dragon likes to inflict upon us.

Compared to some Dragon kits the instructions here are guite clear although they can be cluttered at times.

Turning to the construction of the kit, we naturally start off with the road wheels and suspension. Some months ago I built the Cyberhobby kit with the Pak 36 and, as most parts are identical, those experiences apply here.

The road wheel arms B64 are a little sloppy in their attachment, so I recommend fitting them to the road wheels first and then putting a spacer underneath the hull to get it all level. I would also advise fitting the front road wheel unit to the kit right at the very end as Part A23 (that the wheels mount to) are fragile and prone to bending with the wheels attached. Best practice to fit the tracks at this stage, then fit the front steering assembly so that everything lies level and true. You can skip the engine in Steps 3 and 4 if you are doing the bonnet closed, but the transmission in steps 5 and 6 you have to include. My experience with the transmission is that it is very fiddly - a lot of the parts are

small and fragile and are prone to breaking when you remove them from the sprue. The location of parts is vague in the instructions so great care is needed. Do not fit the optional boxes parts B52 & B36 until you have fixed the transmission to the hull.

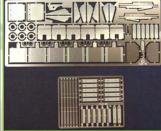
The cab area is beautifully detailed with some beautiful decals provided for the dials. Be careful of part A73 as it is so fine that mine fractured when removing it from the sprue. When you get to the bonnet, it is best to fit parts A28 and A31 to the chassis before the radiator assembly. Once dry, use the grille (A63) to then align the bonnet parts correctly. The hood and grille remain impressive as all vanes and louvers are moulded open and clear, with the ones on the hood being very petite and neatly done (be careful as I would bet a thick coat of paint would block them up and ruin the effect). Racks for eight Kar 98K rifles mount inside the rear body but only four rifles are still included in the kit

The basic Sd.Kfz.10 kit is lovely, but in my opinion it is a shame that the Pak 38 has not received an upgrade with this release. That said, overall it is a nice package that adds to the family. It gets a 7.5/10 from me.

\_imited for the sample



Decal options and those lovely dashboard dials.



New photo-etched parts.



Magic Tracks, yeah!





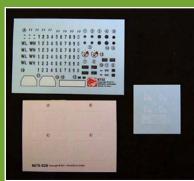








se up of the gun shield parts



New decals and the window masks

# BINDERS

Keep your **Model Military International** collection safe in a high quality binder. Each binder holds 12 issues.

Just £8.50 + p&p

UK - £2.45 Europe - £4.45 Worldwide - £6.45



Available direct from our offices on

+44 (0)1525 222573

or online at:

www.modelmilitary.com





#### Print Your Own Display Plinths...







1:32 1:48 1:72 1:144 1:200 1:400

Instant Download .PDF Files!

www.SCALEMODELSCENERY.com



CLEXNER

Weathering Wash Ultimate Weathering Wash has been formulated with several key non-toxic Unimate weathering was nas seen formulated with several key non-toxic impredients to bring you a superior cap based wash to add detail and realism to your model. The six wibrant colours in our range cover the most widely used in modelling. Be aware, the wash will dry slightly lighter than the colour of the bottle and a good shake and stir is recommended before use.

Photo-Etch Placer
Our photo-etch placer is a re-usable wax based
positioning stick that will help you to hold and
place even the smallest piece of photo-etch or
styrene. A real helping hand when dealing with
the more fiddly side of modelling.

Modellers Sanders
Our range of specially produced Ultimate Modellers Sanders provide an
excellent abrasive solution for the discerning modeller. Uniquely shapec
they are provided in several grifts (100/180/220/220/)200) and a buffer.
They are long lasting and washable, which will allow them to be used to
their maximum potential with the minimum of waste.

Thinny Sicks
Our range of Thinny Sicks anders have been developed specifically to help
modellers get to those hard to sand areas on all genres of models. They
come in three grits (180,724,07,200) and are uniquely shaped to accommodad
all your fine sanding scenarios. They are made from the same hight quality
materials as our Modellers Sanders and are available in packs of six.

Thinny Sponges

Unit Thinny Sponges are designed to compliment our Thinny Stick range. They come in one grit 220, but being a softer sponge it's equivalent to nearly a 300 grit like the full size Ultimate Modellers Sanders. This will prove to be the go to sander on your bench.

#### email: sales@umpretail.com web: www.umpretail.com

We proudly sponsor

Airbrush Cleaner

Our fast & effective Ultimate Airbrush Cleaner is specifically formulated to work with ALL brands of acrylic modellers paint and all types of airbrush. Our cleaner is not overly agrees and will not ruin the seals in your airbrush. We have also added a blue dye to the cleaner to be able to distinguish if from our thinner.







### Pz.Kpfw.II Ausf.C

#### **Assembly**

Now the work can begin. I started by mounting the parts of the ToRo conversion set. Aside from the resin elements, which allow us to modify the front of the hull and turret, this set also includes a decal sheet with markings for five vehicles used during the Fall Weiß.



The resin front part of the lower hull can be attached without any problems. No filler was required to build this sub-assembly.

Once I'd completed the lower hull, I focused on the running gear. To add more realism to the model, I decided to add some damage to the rubber rims of the wheels. I rubbed them with coarse sandpaper...



...replicated some cracks in rubber, using a scalpel blade...



...and wiped the rims with a steel wire brush.

Since the track links are rather fragile, I had to use a razor blade to cut them from the sprues. The wheels were then mounted temporarily, using masking fluid as the adhesive.



I then assembled the tracks in such a way that they didn't glue to the wheels. It's much easier to later paint the model when we can remove the tracks and wheels for this stage.







The shadows were emphasized with transparent layers of X-23 Clear Blue.



Very heavily diluted white paint from Vallejo was used to additionally accentuate chosen details and the most exposed edges of the kit.



I also used a fine brush and Vallejo acrylics to paint the tools and other small details.



The edges of idler wheels were wiped with an 8B pencil.



#### Weathering

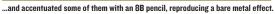
Once I'd secured the paintwork with a layer of clear matt varnish, I could focus on aging and weathering the kit. Firstly, I brush painted a number of fine scratches with Vallejo's Light Gray.













The dirt on the upper hull and turret was replicated with AK-Interactive's AK080 'Summer Kursk Earth', AK045 'Dark Brown Wash for Green Vehicles' and AKO67 'Streaking Grime for DAK
Vehicles' enamels. I started by dampening chosen areas of the vehicle
with white spirit. Once the latter had slightly dried, I blew a little of each enamel fluid from a brush, and spread it over the surface. If necessary, I added more enamel directly with a brush.









Next, I set the micro air control valve on my airbrush to a minimal air pressure, and sprayed some tiny drops of AKO17 'Earth Effects' onto the surface. I additionally shaped some of them with a brush, dampened with thinner.



At this stage, I had to attach the tow cable, made from a thin string borrowed from a 1:35 kit. I only reworked the loops.



MIG Productions P234 'Rubbel Dust' pigments with AK078 surface with air from airbrush. 'Damp Earth' enamel.



To reproduce thick mud, I mixed AKO42 'European Earth' and This was collected with a brush and blown off onto the kit



I then added some plaster to the mixture, and applied this in the same way as in the previous step.



Once the 'mud' had dried, it was quite monotone. To create more contrast and replicate some greasy staining, I brushed AK045 'Dark Wash for Green Vehicles' enamel here and there.



The tracks were treated in a similar way to the lower hull. Before I mounted  $\,$ them, I had to rub their edges and running surface with an 8B pencil, in order to add an authentic looking metal sheen.







In accordance with my idea for displaying this kit, I needed to open the commander's cupola. This required some serious modification of the turret. Firstly, I milled out its interior and cut out a part of the roof.



The replacement roof was made from a piece of 0.5 mm styrene sheet. I cut out the aperture for the cupola from it. It was larger than the original kit's cupola, but closer in size to that which I estimated from the archive photos. However, it's worth noting that many Wz.34s differed from each other.



Next, I scratch built the cupola halves from pieces of 0.25 mm styrene sheet, and cut out the air vents in their roofs.



The turret was finished by adding the round 'crown' to the top of the cupola, as well as the hinges and a few bolts. I conjured up the latter from lenghts of 0.25 mm styrene rod.

I then drilled an aperture in the roof of the combat compartment.



As the resulting hole slightly unveils the interior, I had to make a simplified representation of this area. The Puteaux gun was  $reproduced \ from \ various \ pieces \ of \ styrene \ sheet \ and \ rods.$ 



I also decided to open the armoured radiator cover. Firstly, I had to remove the doors and drill an aperture of the correct size.



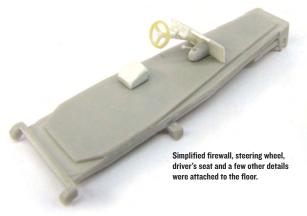
The radiator was replicated by coiling tin wire around a piece of 0.5 mm styrene sheet.



Afterwards, I marked the shape of the doors onto the inner hull sides and added rectangular pieces of thin styrene sheet The latter was made from a piece of 3M masking tape. which acted as simplified visors.

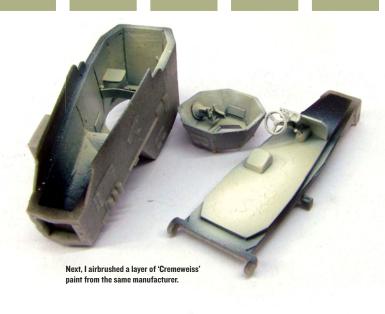


I also added the gunner's seat and driver's backrest.





To continue the assembly, I had to paint the interior.
I started by priming it with Ammo's Black Primer.





Once I'd brush painted the details, I recreated the chipping on the floor and doors, using a piece of sponge, held with tweezers.



The details were brought out with AK093 'Wash for Interior'...



...whilst the dirt on the floor was reproduced using Tamiya Weathering Stick 'Mud'. It was mixed with water and applied with an old short bristle brush.





I chose a rather unusual camouflage scheme. The 'zebra stripes' were sprayed using brown and olive-green colours from the aforementioned Lifecolor's set for Polish AFVs.





#### Weathering



As is usual, my first step during this stage was to recreate some damage on the paint layer. Some bright paint chips were carefully brush painted with Ammo 017 'Cremeweiss', whilst for the darker ones, I used AK-Interactive AK7II 'Chipping Color'.



I then airbrushed some tiny droplets of AKO17 'Earth Effects' onto the hull. Setting the micro air  $control\ valve\ on\ my\ airbrush\ to\ a\ minimal\ air\ pressure\ helped\ me\ to\ achieve\ the\ desired\ result.$ 



The resulting enamel specks were spread over the surface by rolling a cotton bud over them, slightly dampened with white spirit, on chosen areas.



I also added some vertical smudges with a fine brush, dampened with AKO49 'Odorless Thinner'.





The main problem of every modeller interested in building 1:48 vehicles and dioramas is the poor availability of both plastic and resin figures in this scale. What's more, amongst the few we can choose from, many can only be described as poor. In this case, the starting materials were an average quality tank crewman from a Tamiya kit, and two shapeless characters, pretending to be infantry soldiers, from an aged Bandai figure set.



Finally, I added some little, but still important parts like rifle slings etc. A distrinctive rubber strap around one of the helmets was reproduced with a thin strip of Tamiya masking tape.

The uniforms of both infantry soldiers required re-sawing the misrepresented folds with a file. I also removed those details which were too flat or oversimplified, and emphasized the edges of belts and harnesses. Also, one of the figures received glasses, made from 0.25 mm tin wire.



The tanker was cut in two places in order to slightly twist his torso, which helped to adjust him to the turret hatch. I also replaced the right arm with another one, in accordance with my diorama idea.



## **Base**

The base was cut from styrodur foam sheet, to which I glued three properly shaped, thick pieces of foam PVC sheet, creating an elevated area for the road.





The ground was formed from tile adhesive. Before it dried, I poured some very fine sand onto the surface, and created the final texture of the ground. This included imprinting some ruts and tracks.



Once the ground had fully cured, I airbrushed it with XF-52 Flat Earth and XF-57 Buff from Tamiya.



Next, I sowed some grass along the roadside, using static grass. It's important to use different lengths of grass, as otherwise the resulting meadow will look like a carpet. Flowers are always a nice addition to any summer scene. In this case, I used some tiny natural flowers which were later brush painted with very heavily diluted acrylic paints.



To reproduce the dusty appearance of the road and adjacent low area, I airbrushed them with AKO42 'European Earth'.







#### The final touch was to attach the figures, and mount all fine details of the vehicles, which had been left separate to avoid damaging them.

#### Modelspec

ToRo Model 1:48 Polish armoured car wz.34-II with Puteaux gun Kit No. 48019 Tamiya 1:48 Pz.Kpfw.II Ausf.A/B/C French Campaign Kit No. 32570

#### Accessories Used

ToRo Model 1:48 scale Panzer II Ausf.C Polish Campaign Conversion Set - Kit No. 48014 RB Model 1:48 Turned Metal Barrels -Kit Nos. 48B50 & 48B33 Hauler 1:48 scale PE Detail Set for Pz.Kpfw.II Ausf.A/B/C - Kit No. HLX48316 Hauler 1:48 scale German Rucksacks and Bags -Kit No. HLX48196

#### **Tools and Modelling Products:**

Tamiya Extra Thin Cement, C.A. Glue, Styrene Sheets and Rods, Tin Wire, Trumpeter Scribing Tool, Tamiya Masking Tape, Wamod Masking Fluid, UHU Patafix, Magic Sculp Epoxy Adhesive, Plaster, Balsa Wood, Styrodur Foam, Foamed PVC Sheet, Tile Adhesive, Static Grass, Natural Flowers.

#### Paints and Finishing Products:

Paints: AK-Interactive, Ammo of Mig Jimenez, Lifecolor, Tamiya (acrylic), Vallejo Model Color. Ammo of Mig Jimenez 2005 Black Primer Mr.Hobby Clear Varnishes Microscale Decal Solutions 8B Pencil MIG Productions P234 Rubbel Dust pigment Tamiya Weathering Stick Mud Talens White Spirit AK-Interactive weathering products: AK017 Earth

Effects, AKO42 European Earth, AKO45 Dark Brown Wash for Green Vehicles, AKO66 Wash for DAK Vehicles, AKO67 Streaking Grime for DAK Vehicles, AKO70 Brown Blue Wash for Panzer Grey Vehicles,





Andy King takes a look at the latest packaging of Italeri's 1:35 scale LCM, this time including some figures from Dragon.

## HEGINSAMPHIBIAN

originally a British design dating from the 1920s and first saw action in the landings at Norway in 1940 and Dieppe in 1943. The LCM 3, which is the subject of this kit, was built by Higgins Industries in the USA and used mainly in the D-Day landings in Normandy and also in the Pacific theatre of operations.

The kit has been around for a few years and this time around has been released under the heading of 'D-Day Normandy 1944-2014'. Taking a look at the contents of the big box, it Is dominated by a rather large moulding of the LCM hull and surprisingly only five sprues associated with the build up of it. Three sprues are for the Dragon figures. Also there are two thicknesses of thread and a decal sheet with mainly generic numbers and a couple of flags and instrument panels on it.

All parts are quite nicely moulded and more or less flashfree with just a couple of bits here and there. There are mould seams and pin-marks present in some prominent places such as the outside of the upper hull sides and shields for the .50 cal machine guns but generally the standard

The hull is quite a substantial moulding. Parts like this can bring problems such as warping due to the size but I'm pleased to say it seems okay and after test fitting the upper deck it looks to be a good and problem-free join.

The actual parts count for the LCM is relatively low but considering it's basically a floating rectangular box with few frills this would account for it. Detail-wise, it is good enough although as with every kit things can be improved with etched items and the rope fenders would look better actually made from real thread. My wife showed me a technique called 'French Knitting' to make these. The .50 cal machine guns would be better from the aftermarket too.

The air vents on top of the hull are in two parts and will require some creative thinking to get rid of the inside join as these will be virtually impossible to fill and clean up.

There are three crew figures included that are depicted wearing life vests and wet weather clothing but even taking this into account, when you compare them to the Dragon figures the difference is quite noticeable and they seem closer to 1:32 scale.

String is included!



The machine gun would best be replaced

The facial features are a bit cartoonish too.

The six infantry figures mentioned above are from Set No. 6211 'US 29th Infantry Division' and are of typical Dragon quality. There are mould seams present and these are easily removed but again they all have die-lines running across some detail that might be a bit trickier to remedy. Three figures are featured wearing life preservers and the associated webbing, some personal equipment such as canteens, ammo pouches and bayonets are also on the sprue and weapons are limited to the M1 Garand rifle, BAR rifle and M2 Carbine of which you get two each.

Painting-wise you have two options, both of which are grey with a red waterline. One is for the Pacific, specifically Iwo Jima February 1945 and the other for Normandy June 6th 1944. Decals are well printed and in register if a tad thick, and provide generic numbers for any LCM of your

Besides Normandy and Iwo Jima, the LCM 3 was also used for the crossing of the Rhine in Germany during 1945 and as well as being in the water pictures are available that show I CMs loaded onto transporters for overland travel so it opens more possibilities for more (and bigger) dioramas. As well as troops the LCM was capable of carrying a jeep or medium tank such as a Sherman so that will give you more scope to fill the inside of the hull.

The kit itself looks pretty good and with some extra work (and maybe some decent crew figures) it can be made into great model. Recommended!

Thanks to The Hobby Company Limited for the sample www.hobbyco.net







The big front rai



Nice treadplate detail on the upper deck

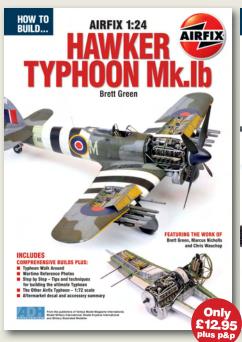




The Italeri figures are a bit chunky and overscale



# from the 'HOW TO BUILD...' series



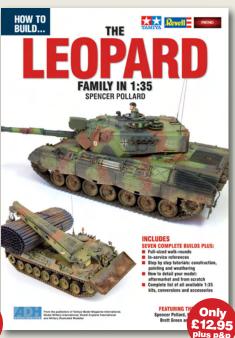


The complete guide to building the amazing Airfix 1:24 scale Hawker Typhoon, written by Brett Green of HyperScale and Model Military fame.

This new book features an exhaustive step-by-step guide to construction with modelling contributions by Brett, Marcus Nicholls and Chris Wauchop.

Detailed analysis of the 1:72 Airfix Typhoon and 1:48 scale kits on the market is also included.

Hundreds of construction photos, reference images, a museum walk around, and how to get the very best from your big Typhoon kit – a must have before you build the model!



## HOW TO BUILD... THE LEOPARD FAMILY IN 1:35

A comprehensive guide to modelling this famous vehicle in its many forms.

Along with the work of the author, you will also find guest features from Brett Green, Marcel Jussen and John Murphy, who's combined talents help tell the story of the seven models, including the Leopard 1A3, 2A4NL, 2A5, AEV, 2A6 and as a specially extended section, the incredible Canadian, C2 MEXAS.

Each of the chapters tells the story of a model using in-depth construction and painting guides, as well as hints and tips on detailing, conversions, sculpting and figure painting. Add to that some exclusive, full-sized reference material and the reasons to add this book to your library, are there for all to see.



## HOW TO BUILD... REVELL 1:32 SPITFIRE MK.IIA

Revell has released an all-new 1:32 Supermarine Spitfire Mk.IIa. With some minor modifications, this model may also be built as a Mk.I or a Mk.Va. Over the course of five Chapters, James Hatch examines the kit contents in detail, describes construction of the model with lavish illustrations, and points out the areas of the kit that may be improved and corrected.

This new book features an exhaustive step-by-step guide to construction; plus a painting and weathering tutorial. A number of essential reference resources are also included.

More than 200 photos, a reference guide, and photos of the kit sprues are all included - a must have before you build the model!

### Already available in the 'How to Build...' series:

















Visit www.adhbooks.com

## JAPANESE CLAWED THE SS-KI COMBAT ENGINE





# ESTING VERY CHA

nce in a while a model subject comes along and just grabs your attention! This was the case with the Soukou Sagyou Kidosha, Japan's version of the British Churchill AVRE and US M32 recovery vehicles. I saw pictures of this beast on the Internet and wanted to build one for my WW2 Japanese armour collection. The only problem was that there was no kit of this vehicle except an older resin one in 1:76 scale! But with a little digging, Japanese armour enthusiast Akira Takizawa directed me to Groundpower #207 (the only source of good photos and details that I found at that time). This article will take you through my journey from design to completion of this very obscure vehicle.

#### A SHORT HISTORY

Although one of the three main tripartite Axis combatants in WWII; Japan lagged behind other nations in the development of effective armoured fighting vehicles. While Japan's medium tanks such as the venerable Chi-Ha are well known, very little is known of her auxiliary and support vehicles. The vehicle was designed by Mitsubishi to serve all engineering functions from bridge laying to bunker busting. It is not known how successful they were deployed as armoured recovery vehicles. While this model looks like something out of a science fiction book, this model is not a "paper panzer" but saw extensive combat.

The Soukou Sagyou Kidosha or SS-KI (literally translated as "armoured working motor vehicle") was the Japanese Army's primary engineering vehicle. It first saw service in China as early as 1932 with the 1st Independent Engineer Company. The 5th

Independent Engineer Regiment was formed in 1939, eventually transitioning to form the engineering unit for various tank divisions in 1942, with six companies of four vehicles in each company. They were not considered "tanks" and never deployed by infantry or as armoured fighting vehicles. Several were later used in the Pacific in the Philippines. None were used by the Japanese Navy.

It could carry a small portable bridge that was deployed apparently (?) with the assist of

tiny rockets on the extremities of the bridge ends to propel the bridge to position as the vehicle came to an abrupt stop (and thus I assume the higher raised angle of the forward bridge support rollers). Its two font large claws were used for mine plowing, while some carried smoke and demolition charges. The SS-Ki was heavily armed and crewed (5) for a vehicle weighing no more than 16,000 kg. She carried up to five Type 100 flamethrowers, along with at least two Nambu Type 91 6.5mm machine guns, which could be interchanged with the flamethrowers. It had a maximum speed of about 40km and a range of 170 km. A total of 119 built among five different versions between 1932 and 1943. The overall type designations were: Kou, Otsu, Hei, Tei, Bo. All versions were quite different physically, with some showing cross variant configurations. None survived the war. This model represents a later hybrid version that fought in the Pacific.

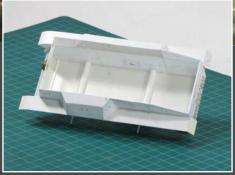
#### PROJECT PLANNING

This model is based on a photo (https://www.flickr.com/photos/ deckarudo/6914209846/) representing one of eight vehicles captured by the U.S. Army in 1945 (note by then they did not carry the bridge and thus is not modelled with one). My research led to the conclusion that the SS-Ki was not based on the chassis of the Type 89 Medium tank as initially stated on several internet chat groups! The hull is longer and wider in order to support the weight of the bridge it carried (Hull Length: 5.2 meters; Width: 2.2 meters; Height: 1.5 meters). It also had an entirely unique and stronger suspension. The factory plan in Groundpower #207 was resized to 1/35 as the foundation for dimensions. I also used many the photos in Groundpower and the few on the internet as my primary references. Given the similarities with other Japanese vehicles, I then looted my stash of 1/35 Japanese vehicles as sources for small parts or masters for casting.

I decided on an interior to this model. Given the level of detail that an interior offers, I planned for the model to be displayed with removable self-fitting panels that could show the entire insides openup, or button-up!



Since the model will be modular with removable panels, I used appropriate styrene thicknesses (mostly .020 and .030 styrene sheets) to replicate the I7mm side walls and I0mm armoured roof (.020 is about 3⁄4 inches in I/35 scale).



This is the model before the floor was added. Note the covers for the main axles which also served as supports for the fighting compartment floor.

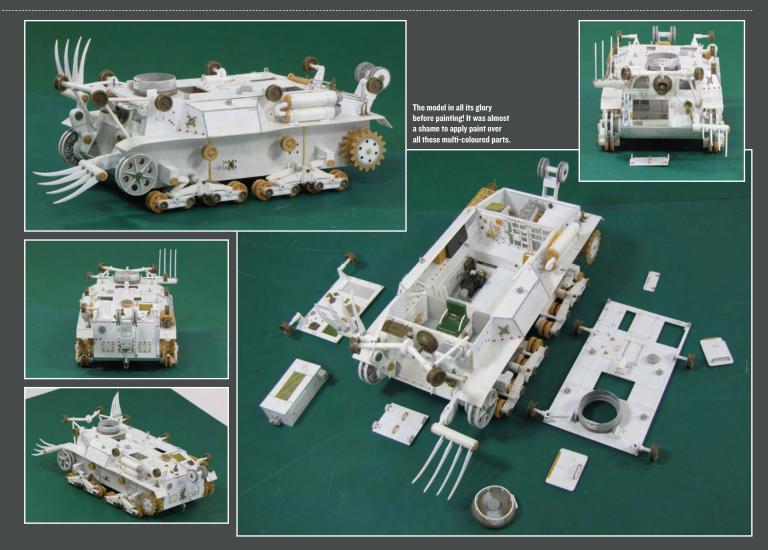


The commander's cupola was cut from .010 styrene using a curved metal ruler, then heat-formed to shape. The hatch itself is from the Type 89 kit.

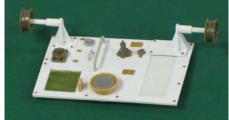


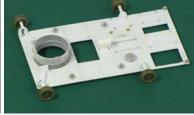
The interior showing the engine bay and crew areas. Note the engine, gas tank, and vent loosely placed in the engine bay at this stage to help size of remaining engine compartment.

















The rear engine deck and top roof. Since the panels are removable, I added detail to both sides.

#### A STRONG FOUNDATION

The most important step in any scratch-building project is a sound hull. The proper dimensions, alignment, and strength of the lower hull will determine how accurate and aligned the rest of the model will be. I use a pane of glass to help align the hull along with wood shims as wedges during assembly to ensure proper alignment while gluing the hull plates. Thin support edging was added to the interior walls to support the placement and removal of the hull plating. The edges of the plates were shimmed to fit at proper angles. Fenders were heat formed at the ends using .020 mm styrene. A raised floor was made from thicker styrene (.040) which also served as a means of reinforcing the lower hull's integrity. The floor was completed using anti-skid sheets from EZ Safety Tread by S&S Products (#311) with a small cut-out on the rear left side of the fighting compartment for the location of the small electric generator. Tichy rivets (.040) were used on the exterior for the bolt detail. All other surface details such as the vents, grab handles, and grills were scratch-built using styrene or brass rod.

#### INTO THE INTERIOR

No photos exist of the interior of an SS-Ki. Since it was loosely based on the Type 89, I based the interior on the Type 89 medium tank. The interior had to be scratch-built as none exists for the Type 89 interior either as an aftermarket product.

I started with the firewall using .015 styrene, as this will provide added structure to the side and top hull plates when those are installed later. I first needed to determine where to position the firewall on the interior layout. I determined the position by basing it on the size of the engine bay (in turn based on the size of the main engine block). Placing loose 1:35 scale figures in the interior at this stage also helps in estimating sizing of the fighting compartment's height, and size of the hatch openings. The firewall was completed as a sub-component with all its details before installation (t is comprised of almost 100 parts alone). Now that the basic interior layout is complete, I then moved to the interior structural details.

The interior of Japanese tanks often had asbestos sheets installed as a fire retardant. These sheets are replicated using .010 styrene sheet and .010 x .040" ribbed styrene. The sheets were textured with MR.SURFACER 500 to simulate asbestos texture. The engine bay was then detailed with vent shafts and piping and other structural details along the walls and floor which had to added at this stage before the engine itself and other details. Ladded fuel piping for the flamethrowers (which are thin rubber tubing from my spare parts box to be installed later). Other details were added including the driver shifting levers. pedals, ammo racks, radios, etc. I borrow the term from Shep Paine's original book on Dioramas that you can use creative "gizmology" and not fuss too much on rivet

counting. I used a plethora of tank interior photos as a basis for such "creativity".

The upper hull plates were then built. There is no secret to how to achieve the right angles except repeated measurement and test fitting based on plan drawings. I always measure "twice' and fit once! In fact measure and re-measure repeatedly before you cut and install. The upper roof, rear engine deck, and forward hatch, were designed to fit snug and removable. All hatches are scratchbuilt with handles fashioned from brass wire.

The engine itself was made of thin .010 styrene wrapped around a basswood core with engine surface details taken from other 1:35 engines. The cooling cylinders are from a 1:32 Japanese A6M Zero, with wiring from thin brass electrical wire.

The transmission is a modified T-34 with scratch-built break bands. The other engine parts (e.g., magneto, battery, carburetor) are from the spares box. The exhausts were made from bent styrene rod heated and formed into the required shapes. The gas and oil tanks were made using square tubing (#256 evergreen square tubing 9.9 x 9.5mm). The small electric generator in the fighting compartment floor was similarly scratch-built. Seats were converted from 1:35 seats found in my spares box. There are almost 400 parts to the interior.

As with all models with an interior, I began painting the interior at this stage. Most Japanese tanks interiors were off-white in colour. I painted the interior off-white over a flat black primer, layering it on to leave recessed areas darker in colour.



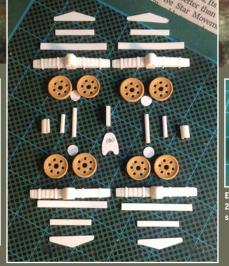
I applied spot washes and vertical streaking effects using lighter fluid mixed with oils (warning: don't smoke while you do this!).



Here's my mix for textured mufflers!









Each main bogie assembly is comprised of around 50 parts, resulting in 250 pieces overall for the running gear alone, including the idler and drive

■ Oil washes of Winsor & Newton 554 (Raw Umber) toned things down further and adding colour depth. The asbestos panels were painted Tamiya XF-55 (Deck Tan) mixed 50:50 with X-32 (Titan Silver) and some XF-66 (Light Grey). The engine bay was painted red-brown (Gunze H47 + a drop of H7 Brown) to simulate the primers often used in these areas.

Weathering consisted of MIG filters P242 (Tan) and P406 (Brown), finished with a pin wash of AKO45 (Dark Brown), with very light dry brushing of highlights with pure white oils. Oil spills were simulated using my own "sludge" mix in equal parts of XF-68 (Nato Brown) + X26 (Clear Orange) + X25 (Clear Green), and supplemented with AK Interactive Engine Grime. All areas of the interior where crew came in contact received light weathering of mud and dirt using various shades of weathering powders

(note that the application of mud and dirt must match the exterior mud and dirt in tonal values). Once painted, all interior areas were masked off to await final exterior painting and weathering.

My philosophy in scratchbuilding is to add as much detail as possible to flood the viewer's eye seeing many different subassemblies and details. In the end I used about 350 pieces to the interior.

#### RUNNING WITH THE RUNNING GEAR

This was the most difficult stage of the project as all components not only had to be scratch-built with many fine parts, but also carefully built to ensure proper alignment! The entire running gear was scratch-built using modified wheels from Tamiya's 1:48 Panzer III wheels (Kit #32524, Part 10013014) with the rubber portion removed via a Dremel tool. This is perfect pattern and size of the

SS-KI wheels! This vehicle requires thirty-two such wheels. By the way, spare parts can be ordered directly from Tamiya as I found the cost comparable and even less compared to casting them in resin.

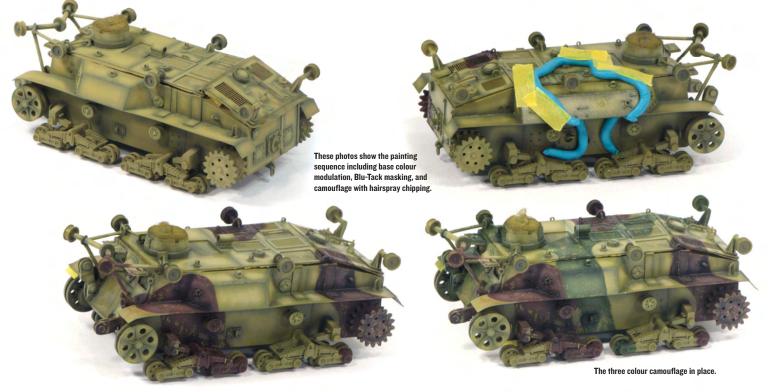
The suspension springs were scratch-built based on a master that was then copied in resin. The suspension covers were made with .020 and .015 styrene with .030 x100 strips for the support springs. The wheel outer arm supports are 16mm lengths cut from Evergreen #187. The axles are .060 styrene rod. The front sprockets were based on modified AFV Club T-34 rear idlers with surface bolt detail removed and styrene ribbing added. The rear sprockets were made using a combination of the Italeri Steyr RSO (Kit 335) part #14B, and Fine Molds Chi He drive sprockets, since I used the Friul Metal Tracks for the Chi He Tank (ATL-70). Specifically, I shimmed the bolt detail and rubber portions

off the RSO wheel, then took the Fine Molds sprocket (with the centre portion removed) and mated the RSO and Fine Molds parts together to form the new drive sprocket. A new hub cover was made. The return rollers were from the Type 89 kit (#16) with bolt detail added (I added .020 shims and then .100" styrene rod for the axle).

#### THE DEVIL IN THE DETAILS

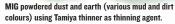
Now for the remaining external details:

- The front de-mining claws were made with styrene rod and .080 styrene as the claw neck/base and .060 mounting plates. The rakes themselves were made from .040 shims with .020 strips for detailing along with Tichy bolts. The mining teeth are #136 evergreen .75 x 3.2mm.
- The forward bridge roller support rods were made from #213 Evergreen. Side rods were heat











Notice the little details that show human presence such as the bottles of Saki, propaganda magazine, tanker helmet, and spent shell casings (made from .020 styrene rod painted with Alclad II Polished Brass (ALCI09)!

formed at the ends. The most difficult part of this entire project was the installation of these support arms. I had to use a jig that I use for my WWI rigging to help position the arms during gluing. The bridge roller supports are from the Fine Molds Type 89 kit part #H16 (Note: initial web references that this vehicle is based on the Type 89 turned out to be completely inaccurate and my purchase and initial modifications of this kit were wasted, so I used the parts as spares).

- · The muffler and rear winch were scratch-built. The MG mount was cut off from the Type 89 mantlet.
- A scratch-built wooden frame (which I do not know the purpose of) was added to the rear armoured plate as shown in period photos.
- Flamethrowers are made using Evergreen # 211 rod (.040 or 1mm in size), sandwiched with two smalls trips of styrene to simulate the Type 93 Japanese Flamethrower. Note: the barrels of the flamethrowers were installed last from the outside to make to easier to paint and weather the exterior.
- Exterior flame thrower fuel tanks are 228 1/4" tube or 6.3mm diameter.
- The jack and mount were modified from the Type 89 kit.
- Spare photo-etch frets were used as mounts for the tools.
- To give a sense of the depth of exterior detailing, the roof is comprised of about 125 parts alone.

#### PAINTING AND WEATHERING

The goal for this model was to show moderate weathering given the short life-span of this vehicle in a tropical climate. I also did not want to cover up intricate the paint scheme and details with layers of "eastern front style" mud!

This model was painted in a late war three-colour camouflage scheme. It should be noted that late war paint regulations indicate a change from exterior red-brown primers to using khaki as the primer and base colour simultaneously (likely to simplify the painting process while minimizing paint stocks). The base colour was called karekusairo or "parched grass" and best described as a greenish-yellow kaki. This was the standard basic tank colour after 1942. To simulate this colour, I took the Gunze Mr.Hobby IJA Paint TC15 and compared it to Nick Millman's excellent reference (Japanese Armour Colours - a Primer 1937-1945) and came up with this custom mix for three tone camouflage colours using Tamiya acrylics as follows:

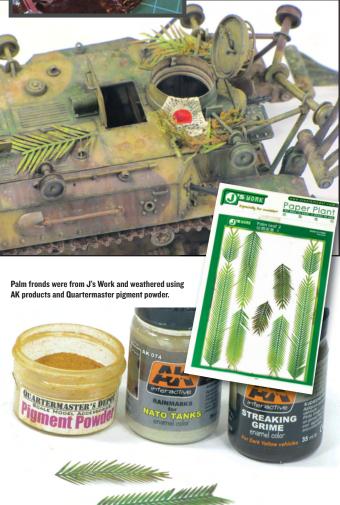
- · Karekusa iro base colour (parched grass): 60% XF-49 (Khaki) + 15% XF-60 (Dark Yellow) + 15% XF-4 (Yellow Green) + 10% XF-67 (Nato Green). This colour approximates FS16160. I mixed black grey (XF-63 German Grev) with this custom mix, and white/flesh (XF-2 and XF-15) to provide a range for modulation.
- · Tsuchi iro (dark earth or chocolate red brown): 45% XF-9 (Hull Red) + 45% XF-68 (Nato Brown) + 10% XF-69 (Nato Black). Again I used dark greys and whites to create modulation and depth.
- Grass Green is close to FS34096 using Tamiya XF-67 (Nato Green) out of the bottle with a bit of white added for scale effect.

The painting and weathering Sequence:

1. Sprayed Tamiya Fine Primer (white or grev does not matter) right out of the can. Scratchbuilding results the use of many different types of materials. A good primer coat cannot be underestimated in providing a uniform based colour and surface for subsequent finishes.



The battle flag was made using Wine bottle foil with decals (Master Box) applied over the foil and shaped to lie over the commander's cupola. It was weathered with oils to tone down the colours.













Products used for track weathering.

- 2. Sprayed the entire model flat black.
  - 3. Airbrushed the base colour with tonal modulations, followed by patches of the other two camo colours using the hairspray technique to simulate wear of poor quality paint applied over the khaki base. Masking was accomplished using Blu-Tack reusable adhesive putty. These colours were also modulated to give depth. This step took time and patience as I could only work in small areas for easier chipping using AK Worn Effects.
  - 4. Applied filters to establish consistent depth using MIG P242 (Tan) over all camouflaged surfaces. This filter softens the colours together and sets the base colour for subsequent weathering. 5. Sprayed a very thin mist of Tamiya XF-52 (Earth) on all undersides and lower areas of the model.
  - 6. Added paint chips with Vallejo black grey and Prismacolour Coloured Pencil PC #1058 Warm Grey pencil crayon for light scratches (mostly topsides).
  - 7. Sprayed gloss coat to prepare for oil washes.
  - 8. Apply Winsor & Newton oil wash of #554 (Raw Umber) and 502 Abteilung Industrial Earth in equal amounts thinned with Humbrol thinner.
  - 9. Sprayed semi-gloss to prepare for oil mapping to bring some warmth back using Winsor & Newton oils and Abteilung oils that

- are close on tonal values to the three camo colours.
- 10. Sealed with Testor's Model Master Acryl Gloss.(4638).
- 11. Applied overall wash of Winsor & Newton #554 (Raw Umber). 12. Applied thick mud in varying
- shades using powders mixed with acrylic resin, plaster, Tamiya XF-52 (Earth), and water.
- 13. Applied final clear coats of flat using Testor Model Master Acryl Flat (4636).
- 14. For the tracks I used Blacken It (several coats), followed by splotches of various shade of beige and browns applied with a sponge. Several thick washes toned down the colours. Bits of mud and leaves were applied between the tracks. Powered steel was then rubbed on the track guide teeth, wheel surfaces, and track pads.

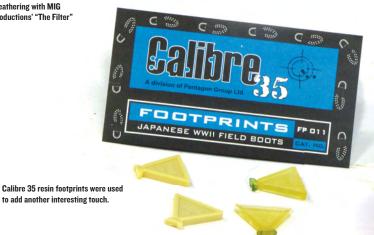
#### **CONCLUSIONS**

The accomplishment of scratchbuilding is not just the process and finish of a unique subject, but rather the wonderment I see in the eyes of armour enthusiasts who have seen it all but say: "Never seen one of these before"!

I really had fun with this project and tried my best to put in as much detail as I could squeeze on this small canvass. The model took about 2 years of intensive work to complete and is comprised of about 2,000 parts. Now onto an "out-of-box" build! Happy modelling! ■



Weathering with MIG Productions' "The Filter"





he last weekend in June
was Tankfest time at the
Bovington Tank Museum.
Once again, the two days
had brilliant sunshine for almost
the whole duration, despite the
gloomy forecast of rain storms for
Saturday.

The museum has organised several special events throughout the year to mark all the significant anniversaries that occur this year, during May it was the 70th anniversary of D-Day, Tankfest marked the 70th anniversary of Operation Market Garden and on the 4th August there will be a commemoration of a hundred years since the outbreak of the First World War.

There was also a bit more variety to this year's arena displays with a tug of war contest featuring teams pulling Scorpion light tanks and on the Sunday a display by the White Helmets motorcycle display team. There

were also several new museum vehicles taking part, an M110 SPG, a Buffel the South African mine resistant vehicle and a BRDM-2 clear lane marker variant of the Russian armoured car. The Museums new exhibits were joined by several from the Crompton collection which will be familiar to viewers of the Combat Dealers series shown recently on the Quest freeview channel. Bruce Crompton and his team brought with them a Jagdpanzer 38 (Hetzer), SdKfz 251 D, Kubelwagon and a 75mm PAK 40 anti-tank gun.

The military vehicle displays were started by the three Leopard tanks, two ex-Canadian Leopard C2s and a German Leopard 1A1A1. The British Army traditionally puts on an excellent display of currently serving vehicles at the show and this year was no exception. The British Army section started with the Jackal a whisper quiet wheeled reconnaissance vehicle followed

by a Scimitar 2 CVRT Combat Vehicle Reconnaissance Tracked. Next up was a Titan bridge layer followed by a favourite of mine, the Challenger 2 TES named Megatron; Megatron has displayed at several Tankfests over the years and is up for a major overhaul hopefully ready to be back next year. Then came a Warrior which was fitted out with all the latest protective shields and bar armour for service in Afghanistan. The final current combat vehicle was the CRARRV ChallengeR Armoured Repair and Recovery Vehicle.

The theme then continued back in time with the Museum's Cold War collection. This included the Saladin, Saracen and Stalwart which all share the same running gear. Then the Ferret armoured car, both British and ex-Swedish versions of the Centurion, a Comet just back from restoration and sporting a new paint scheme, Chieftain Stillbrew and a Khalid in Jordanian paint

scheme. Then it was the turn of the American M60A1, M103 and the newly acquired M110, followed by the Russian BRDM-2, BTR-60PA and a Chinese T-59 although it is now in Russian markings. The section was finally finished off by the South African Buffel which looked like something out of a science fiction film to me.

Going back further in time, it was the turn of the Second World War vehicles. When you consider all the 70th anniversaries of key battles in World War Two it is surprising how many of the vehicles in this section are still able to run. This is due to the hard work of the Museum staff and the army of volunteers who donate their time to not only maintain the vehicle collection but also help out with the smooth running of the event each year. Taking part in this section were a Matilda I, Valentine Mark IX, the unique Valentine DD, Daimler Dingo, Hetzer, T-34/85,



Andrew Willis reports on the wealth of armour on display at Tankfest 2014.

SdKfz251D, Panzer III and Tiger.

The arena displays closed with the traditional mock battle, which this year centred around a bridge built on the mound in the centre of the arena to represent Arnhem Bridge during Operation Market Garden. There was also a rather nice display by a P-51 Mustang followed by a Dakota which fitted in nicely with the British Paratroopers assaulting one end of the bridge and the German Fallschirmjagers defending the other end. The Germans were supported by a Kubelwagon, Hetzer and Sd.Kfz.

251D from the Crompton collection and the Kettenkraftrad, Panzer III and Tiger from the museums own collection. It is surprising how much interest there still is in the Tiger after all the years it has displayed at not only at each year's Tankfest but also its own Tiger days.

That concluded another year's Tankfest and it will be interesting to see what next year will hold in store - fall of Berlin maybe using their Russian collection perhaps or even the Rhine crossing using amphibious vehicles? Now there is a challenge for them!











Warrior









CRARRY



Stalwart



Centurion



**Daimler Dingo** 



T-34/85



Jagdpanzer 38 Hetzer



SdKfz 25ID







M60Al Patton



BRDM-2



Buffel







BTR-60PA



Matilda I



Tiger I



MIIO



Titan Bridgelaye



Type 59



## Incoming







#### ICM

#### 1:35 SCALE KADETT K38 SALOON • KIT NO. 35478

Comprising 142 parts, ICM's latest kit is of the Opel Kapitan 2-door saloon, a car that served in Wehrmacht & Luftwaffe units on the Western & Eastern fronts right up to the war's end. This is quite a basic kit by today's standards, coming on 4 sprues with one for the clear parts A set of markings gives us four options, the most attractive being two camouflaged vehicles in Libya 1942 and France 1944. If you want, you can chrome up the bumpers and other parts for one of the options. Detail is sharp in most areas, soft in some, but more than adequate. One thing that stands out immediately is the way that the tyres have been moulded. Sadly it isn't up to the standard of the rest of the kit and the tyres really do let it down. Construction starts with the engine and progresses through the suspension units and main body. There are 21 steps in all but, in typical ICM style, they are clearly drawn, uncluttered, and simple to follow. Detail on the engine and suspension is really quite good and a shame that most of it is hidden – I recommend you leave the bonnet off so as to see all of this. We get decals for the dashboard gauges and a full set of driver's pedals and levers. Beware the teeny-tiny door handles as they have heavy sprue attachment points and will either easily break or make a snack for the Carpet Monster.

The main body itself is made up of separate panels so, in line with the other ICM car kits that I have built, I recommend care and plenty of test fitting. Fortunately, as it is only the two-door version, this should be much easier than other kits. Worthy of note is the main grille and the Opel badges, all of which are superbly represented.

This is a lovely little model. It is cleanly moulded with no faults and, if you like your WWII cars, fits a nice little gap. The tyres are a let down, but there is room for plenty of super-detailing if you wish to make it better. A thumbs up from me. Recommended

#### **Graham Tetley**

Thanks to ICM for the sample www.icm.com.ua





#### ICM 1:35 SCALE KAPITAN SALOON STAFF CAR WITH SOVIET STAFF PERSONNEL • KIT NO. 35477



Comprising 157 parts, ICM's latest kit of the Opel Kapitan follows on from the 2-door saloon recently reviewed. In this version, all of the bits that were snipped from the sprues have now been left in place to give us the 4-door version. To compliment this, we have a set of 4 figures comprising another 36 parts. This is quite well detailed, coming on 2 sprues, with one for the clear parts and another for the figures. A set of markings gives us four options, the most attractive being a camouflaged vehicle in Poland 1944. If you want, you can chrome up the bumpers and other parts for two of the options. Detail is sharp in most areas, soft in some, but more than adequate. One thing that stands out immediately is the way that the tyres have been moulded. Sadly it isn't up to the standard of the rest of the kit and the tyres really do let it down. Construction starts with the engine and

progresses through the suspension units and main body. There are 21 steps in all but, in typical ICM style, they are clearly drawn, uncluttered, and simple to follow. Detail on the engine and suspension is really quite good and a shame that most of it is hidden – I recommend you leave the bonnet off so as to see all of this. Sadly, the dashboard decals have not been included in this kit.

Thankfully, the doors here are moulded as separate items and I pleased to see ICM do this. This is a lovely little model. It is cleanly moulded with no faults and, if you like your WWII cars, fits a nice little gap. The tyres are a let down, but there is room for plenty of super-detailing if you wish to make it better. A thumbs up from me. Recommended.

#### **Graham Tetlev**

Thanks to ICM for the sample www.icm.com.ua











#### ICM

#### 1:35 SCALE WWI AUSTRO-HUNGARIAN INFANTRY **WEAPON & EQUIPMENT** ITEM NO. 35671

With the 100th anniversary of the start of the Great War this year it is good to see that the mainstream manufacturers are now turning their attention to the 'War to End All Wars'.

Aside from the tanks that are coming from the big boys, ICM has entered the fray with a handy accessory set. We have two identical sprues of 208 parts in total that give us two each of an M1908 and M1912 machine gun on it's tripod, various rifles, helmets, hand grenades, entrenching tools – in fact just about everything you need to kit out a WW1 diorama. All parts are cleanly cast with no blemishes or knockout pin marks anywhere. Detail is sharp and welldefined throughout, in fact worthy of note is the ammunition belt. Painting is covered by Testor Model Master numbers but you can easily match those to anyone else's range. This is a very simple and basic accessory set so I can't really say much more.

The only criticism I have is that the rifles are not labelled so you do not know which make they are, but it is a minor point in the grand scheme of things. Overall this is a lovely set and sorely needed to compliment those tanks that Tamiya, Takom et all are bringing out. A 9.5 out of 10 from me!

Highly Recommended.

#### **Graham Tetley**

Thanks to ICM for the sample www.icm.com.ua

















#### **VALLEJO**

#### **BASIC COLOUR SET** ITEM NO. 71178

Comprising 16 bottles, this will be an ideal introduction to the world of Vallejo. Included in this set we have a range of base colours (White, Red & Yellow) plus several useful weathering & camouflage shades (Mud Brown, Burnt Umber, Yellow Ochre) that can be used on all vehicles, aeroplanes and figures. The majority have RAL or FS numbers noted, so

can be easily matched to many manufacturer's kit instructions. I personally find these paints ideal for brush painting fine details (especially uniforms) and must admit to not having much success in feeding them through my Iwata or Badger airbrushes.

This dinosaur still uses Tamiya acrylics for that. but some of my modelling friends swear by the Vallejo range.

There is not much that you can really say about a paint set, other than if you want a grounding in Vallejo then this is cheaper than buying the bottles individually.

Try them, experiment, and then work your way through the entire range! Recommended.

#### **Graham Tetlev**

Vallejo Paints are available from Creative Models Limited www.creativemodels.co.uk

#### ARCHER FINE TRANSFERS

#### AR35383 - GERMAN ROAD SIGNS AND CIVILIAN SIGNAGE AR88095 - GENERIC PIANO HINGE

Archer Fine Transfers has an interesting selection of recent releases. The first is a set of 26 1:35 scale German road signs. There is a great selection here that will be an ideal garnish for any vignette or diorama.

Most of Archer's markings are dry transfers, but these markings are special waterslide decals that require hot water removal from the sheet. The instructions cover these requirements.

The instructions also include templates to make it easy to cut base plates for the signs from plastic card. They also include translations for all of the German-language signs.

Next up is a set of generic piano hinges in three different sizes. These texture decals are designed to be applied direct to the surface of a model before painting. These will have a myriad of uses for both aircraft and military modellers across a range of scales. These are conventional waterslide decals, and application instructions are included.

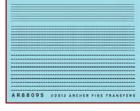
Both Recommended.

#### **Brett Green**

Thanks to Archer Fine Transfers for the samples www.archertransfers.com

Archer Fine Transfers are available online from Creative Models Australia www.creativemodels.com.au







## 1:48 Scale - A round-up of the latest news and releases

## **SO WHERE DO WE GO FROM HERE? HAVE YOUR S**

with modellers from all around the globe. I often ask, "What you would like to see in 1:48 scale?" Now, some have no interest but others chime in and give me their pet loves mentioning some rare often neglected subject that, on the face of it, would maybe sell a half a dozen copies worldwide.

Dammed if you do and dammed if you don't seems an appropriate saying for any manufacturer entering the hobby today.

Being a manufacturer of anything model related leaves one open to all sorts of criticism. I remember back in the day, any new kit was welcomed with open arms. Kits were cheap but brother were they nasty. Detail was something you generally added and was not included. Tracks were easy to

band. Construction sequences were few and far between (probably, as there were so few parts) and instructions well, they were generally pretty basic affairs. Accuracy was just guesswork on the part of the kit designer and die cutter. Yes indeed, we had it good back then. I often laugh at comments I hear and see on the various news groups. Other modellers however mention the "no brainers". Take for example Tamiya. Why they haven't released a T-55, T-72, BT-5 or 7, Churchill or Dragon Wagon is quite beyond me. I often find myself building 1:35 as there are no plastic kit based subjects in 1:48 scale. How I would love a plastic 1:48 scale plastic kit of an M18 Hellcat or US

How good would it be to see Bronco's Chaffee or

brainers. I'd like to conduct a very unscientific poll of our readers and ask what you want to see. More figures? More armour, more detail, less detail, more varied colour schemes?

I'll publish the correspondence in this column whenever they come in. I'd like to hear from you and I'm sure the manufactures would as well. Please address all requests to the editor's email, editor@modelmilitary.com , with the title "What I'd like to see in 1:48 scale"

Let's give this whirl. It can only help. The more responses, the bigger the chance we may see it.

> Until next time Luke Pitt



#### BRONCO MODELS

#### 1:48 SCALE **RUSSIAN SELF -PROPELLED GUN SU-152 KIT NO. ZB48004**

Well, it's here and it's good! This new kit of the so-called "beast killer" from Bronco will be undoubtedly popular. The kit is moulded over just four medium green coloured sprues that consist of 110 finely detailed parts. A clear sprue is included, as is a small photo-etched fret together with a small length of tow rope. Four marking choices are proved: two in OBD green and two in whitewash. A first class instruction sheet is included which is both clear and precise. The level of detail on this kit rivals anything in 1:35 scale and come close to their superb larger scale offering. It is quite frankly a case study on how to do a 1:48 scale plastic military kit correctly. I have heard on various forums that the parts count is too high for such a small kit and to be frank, I think that view is absolute and utter nonsense. This kit is an absolute gem and may well be one of the best plastic 1:48 scale kits I have had the pleasure to review thus far. Take for example the road wheels. Not only do they have a finely rendered outside surface they have the inside surfaces as well. Everything is moulded almost in scale from the ever so polite mud guards to the incredibly thin grap handles.

The barrel is noteworthy for a number of reasons: it includes the flutes on the end, is hollow and is moulded in one piece! The tracks are on the link and length variety and have no knock out marks on either side.

Some may be critical of the moulded on engine grates, but honestly, they are so good you would be hard pressed to better them with photo etch.

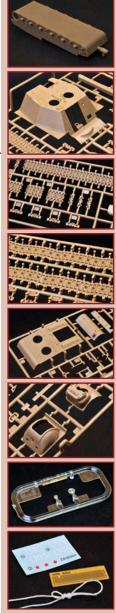
I recommend you buy this kit and experience how good a 1:48 scale kit can be.

Highly recommended.

Thanks to Bronco Models for the sample.

http://www.cn-bronco.com

Luke Pitt





#### **VOLKSSTURM BERLIN. ITEM NO. 48 003 ENGLISH MIDDLE AGES KNIGHT. ITEM NO. 48004**

This new firm, History of War, has sent through some quite nice resin figures for review this month. The first figure is a Volkssturm in Berli, but could be anywhere late WWII to tell you the truth. The figure consists of a body, two alternative heads and two arms. The sculpting and pose is quite good with fine facial features in evidence. The uniform is also handled well with very fine fabric folds and uniform details. The pose is also a good one, as is.

The second figure is an English Knight (say what?) in action welding a sword. Strangely, this figure is labelled a Knight but looks more like an indentured serf to me.

I like both of these figures as they are rendered to a high standard. The English Knight is an interesting choice, but one wonders how popular this one will be. Both Recommended.

Thanks to History of War for the samples.

Luke Pitt

Luke Pitt hosts MMI's examination of the growing world of 1:48 scale military models, figures and accessories.



#### **TORO MODEL**

#### 1:48 SCALE TWO SHEEP AND COW **ITEM NO. 48F60**

The title on this set sounds a little like an arty French film from the 1950s. Nevertheless, the two sheep are cast very well with the heads coming as separate pieces. Both are having a bit of a sniff or graze. The European Frisian Cow is cast very much in the same way as the sheep with the head as a separate piece that does allow a fair degree of creativity in the posing. The critical physical characteristics of each animal are rendered very well and they do look the part. These little guys would be equally suited for a field setting or in the back of a flat bed truck. Recommended

Thanks to Toro Model for the sample http://toro-model.home.pl

Luke Pitt











#### ACE

#### 1:48 SCALE SOVIET GAZ-M-415 SOVIET WW2 PICKUP **ITEM NO. 48105**

This firm is fairly well known for producing workmanlike Braille scale kits with this new 1:48 scale release being second GAZ vehicle.

The kit is presented in a fairly flimsily box with a very atmospheric and very well drawn illustration on the box top face. 43 plastic, 4 vinyl and one photo etch fret are included. The moulding of the majority of the plastic parts of the vehicle itself is generally good with no real flaws. The parts do however exhibit a fair degree of flash. The parts breakdown consist of a separate chassis on to which most of the running gear is placed.

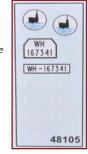
The wheel hubs are moulded separately and seem finer than the rest of the kit in terms of detail. The vinyl tyres are something of a master stroke as they are not only very well detailed with an accurate tread pattern and side wall detail in evidence but are extremely easy to assemble.

No clear parts are included but a template is provided the windscreen side and rear window. The headlights however are moulded solid.

A small photo etched fret is included that includes the side engine grills, three quarter side window frames and number plate surrounds.

Two green marking choices are provided (2 Russian and one German) with a small and well printed decal sheet included. I was greatly impressed with this kit. While not a state of the art techno marvel, it is a well thought out, accurate and indeed different model kit with great bones. Recommended.

Thanks to Hobby Terra for providing the sample kit http://hobbyterra.com/ Luke Pitt









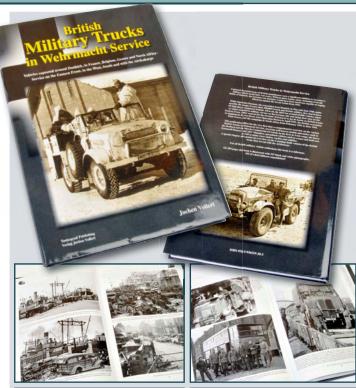
## **Upcoming**

I'm always impressed by the grass roots support that the 1:48 scale community seems to muster. I have spoken before about a certain individual named Philip Young, Mr Young has a great interest in the scale and in particular, the absence of figures in the scale. He has taken it upon himself to contact various sculptors from around the globe and commission them to produce figures and heads in 1:48 scale. He has also contacted resin casters and I'm told these will be available within the next few months directly

The heads are quite outstanding and rival anything in 1:35 scale.

He may be contacted on the following email address Pjyoung2@comcast.net









#### TANKOGRAD PUBLISHING **BRITISH MILITARY TRUCKS IN WERHMACHT SERVICE** BY JOCHEN VOLLERT ISBN: 978-3-936519-30-3

During the course of the Second World War, the German Armed Forces were particularly adept when it came to capturing enemy vehicles and pressing them back into service for their own advantage. The Germans referred to these captured vehicles as "Beutefahrzeuge", and they played a pivotal role in the German's efforts throughout the war.

As the title would suggest, this hardcover book focuses on the Beutefahrzeuge that were formerly owned by the British Armed Forces. Spread over 304 pages, the book contains 547 B&W photos, 425 of which according to the author are previously unpublished. This largely photographical book kicks off with a couple of chapters concentrating on the key events/battles that provided the Germans with the opportunity to capture large quantities of British wheeled vehicles. Given the vast amount of vehicles left behind by the British following the evacuation of Dunkirk in June 1940 ('Operation Dynamo'), naturally this event is heavily focused on within these opening chapters. On that note, this fascinating section contains some amazing period photos depicting the streets, canals, and beaches of Dunkirk littered with the 65,000 vehicles that were abandoned by the British forces during Operation Dynamo.

Following these early chapters, the book subsequently concentrates on the vehicles themselves, with each British vehicle type receiving up to several pages of photographs illustrating use within German service. These photo sequences cover the use of British wheeled Beutefahrzeuge on near all combat fronts, with each photo having a very informative caption to put the image into context. A vast array of vehicles are covered, including my personal favourites the Dorchester ACV and the Scammell Pioneer.

I found this book to be highly interesting, and it offers inspiration and reference material for an abundance of unique modelling subject matter. As a builder primarily of German WWII vehicles, this book has prompted me to expand my interest into a new subject matter (and consequently an excuse to expand my kit collection!).

Highly recommended.

Thanks to Tankograd Publishing for the sample http://www.tankograd.com Alex Dutt

#### SABINGAMARTIN PUBLICATIONS **MAGACH TANKS OF THE IDF -**MAGACH 1 & 2 VOL.1

BY DR ROBERT MANASHEROB ISBN: 978-0-9841437-9-5

The IDF have been masters at getting the best out of seemingly obsolete weapons platforms by modifying them to get what they want out of them. This has mostly been caused by the various arms embargos that have been applied to the modern state of Israel since its troubled birth in the late 1940s.

One of the most modern tanks available to the IDF in the 1960s was the British Centurion Mk. 5 which was a match for anything that the Arab Armies could mass against it. Despite this there were a lot of things about the Centurion, known as the Shot (Whip), that the IDF (and a lot of other users) weren't satisfied with. Most of these centred on the Meteor engine and gearbox that were essentially throwbacks to the 1940s modification of the Merlin Aero engine. To overcome this the Israeli's sought the latest US design, the M48, which America initially refused to supply.

The Israelis continued to lobby the US but also looked at acquiring the West German Leopard. Delays with the Leopard program led eventually to a complicated deal with the US to indirectly supply refurbished ex German M48 Tanks. This book the latest in this fascinating series outlines the convoluted and long drawn out history of the acquisition of the tank the Israelis codenamed the acquisition project Magach which for the next 40 years was the name applied to the variants of the M48 Patton in Israeli service. The Israelis always wanted a diesel variant and to rearm it with the excellent British L7 105mm gun however all the initially supplied vehicles were Petrol engine and armed with the US 90 mm gun.

Up until now, in depth reference on Israeli equipment has been hard to come by but this is slowly being addressed by books such as this one which is part of an excellent and critically acclaimed series of books on the IDF's armour by Dr Manasherob. This title covers the Magach 1 & 2 which were essentially the M48A1 and A2C variants and is Volume 1 of what I imagine will be long series given the length of service this AFV has experienced with the IDF. It is packed with the history of the acquisition and a myriad of information on the Early IDF tank corps personalities which I found surprising given the Israelis usual approach to security considerations. Despite being a softcover, this book exudes quality from its first pages. It starts with an excellent history of the Magach genesis and development and progresses to a fantastic high quality photo gallery of the Magachs in acquisition, training and active service. This is interspersed with text, excellent captions and superb scale drawings of the Magach 1 & 2. A superb collection of colour walkarounds of various museum examples follows on and this leads into colour plates of early service examples and a section on colours and markings. The research that has gone into this must have taken years and the author's depth of knowledge bleeds from the pages. This is simply one of the best modelling references I have seen and is a must have to modellers of Israeli Magach MBT's. This book will appeal to armour enthusiasts and historians equally and is not just for the modeller. I eagerly await further volumes and hope to see these grouped into hardbound volumes one day. The quality of the contents deserves it and while I had reservations about the high price locally, one look at the contents had me emptying my wallet quick smart. This is a first rate book and it's hard to believe the author has crammed so much and to such a high standard into the books 80 pages. I wholeheartedly recommend this title as a must have to armour modellers interested in the IDF, The M48 Patton tank or battles of the Middle East. I equally recommend it to armour enthusiasts and historians. Highly Recommended.

Thanks to SabIngaMartin Publications for the sample www.sabingamartin.com





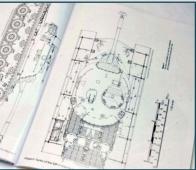














#### **MMP BOOKS GREEN SERIES NO 4114** THE MEN INSIDE THE METAL - THE **BRITISH AFV CREWMAN IN WW2 VOL. 1**

BY DICK TAYLOR

ISBN: NOT QUOTED

Dick Taylor embarked on a monumental task with his four volume Warpaint series, which he now follows this up with a title covering the men who crewed those British armoured vehicles in World War Two

Again the Author has used his intimate knowledge of the British Army and his research skills as a historian to deliver another detailed reference. To my knowledge, this is the first time the subject has been tackled except as part of general titles covering many nations and I commend the author for tackling it in detail. The sheer scope of the subject limits what can be achieved and Dick is making available to the reader the closest thing to a complete single reference on the subject.

This volume mainly covers a variety of subjects and is broken down into Chapters on the subjects detailing:

- Chapter 1 Uniform Items
- Chapter 2 Badges and Insignia
- Chapter 3 Personal Equipment
- Chapter 4 Crew Equipment & Weapons

Like its predecessors, this Volume is thorough and Lt Col Taylor's research presents the reader with data well supported by photographs in both B & W and colour. I like the fact that, unlike other authors, he does not categorically state something based on a single source or interpretation of official documents (or photographs) but is measured in presenting the most credible outcome whilst remaining open minded as to interpretation. Again the photographic smorgasbord presented in this book has been well selected to illustrate the information presented by the author and is presenting a lot of rarely seen photos. The chapters are packed with detail and illustrated with period photos, photos of preserved items on re-enactors as well as coloured diagrams, sketches, illustrations etc. Some of the information is presented in detail for the first time and is quite interesting. Additionally there are "See Also" panels referring the reader to IWM photographs relating to the subjects being discussed. The author has sought out commentary from people that actually crewed the AFV and many small anecdotes are found throughout the chapters that serve to amplify or illustrate the information presented. The list of acknowledgements in the opening pages gives an idea of the depth of research that has gone into this publication.

This is the first title I have read that covers solely British AFV crew in such detail and the information has been missing from the public arena for a long time. This will be invaluable to modellers, collectors and re-enactors amongst us and I like the author I look forward to seeing this information used to add some colour to what can be drab modelling subjects.

The Author is to be commended for this and its preceding titles which have gone a long way to providing a single reference on a hugely complex subject. For anyone with an interest in British armour or military vehicles these titles are essential and no serious modeller of British military vehicles should be without them. I cannot recommend these titles highly enough.

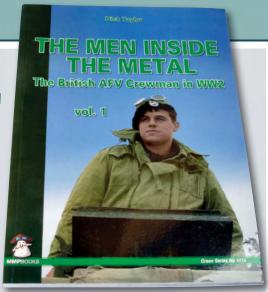
Again I would recommend this book for those with an interest in British military vehicles whether as a modeller, historian, re-enactor or collector. It is well written, superbly researched and presented in an easy to read manner. I eagerly await Volume Two.

Highly Recommended.

Thanks to MMP Books for the sample

www.mmpbooks.com

Al Bowie











## BUYERS GUIDE>>>>>>>

### **AVID READER**

Tel: 01299 823 330 Fax:01299 829 970

Unit 10, Hodfar Road, Sandy lane Ind Estate, Stourport On Severn, Worcestershire, DY13 9QB

MILITARY, AVIATION, NAVAL, MODELLING, RAILWAYS, CAR & MOTORCYCLE BOOKS

9.30 - 4.30 MONDAY TO FRIDAY BY APPOINTMENT ONLY

WWW.BOOKWORLDWS.CO.UK

INFO@BOOKWORLDWS.CO.UK VISA/MASTERCARD/MAESTRO

### **PARABELLUM**

Tel: 0121 551 8878 Fax: 0121 707 1471

54 Vyse Street, Hockley, Birmingham, BI8 6HR

11.00AM TO 5.30PM THURSDAY, FRIDAY & SATURDAY

SPECIALISING IN AIRCRAFT, ARMOUR, VEHICLES & FIGURES IN 1/72, 1/48 & 1/35, VALLEJO PAINTS, MAIL ORDER 1/48 website: www.parabellum.co.uk email: sales@parabellum.co.uk

**MASTERCARD/VISA** 

### HALIFAX MODELLERS WORLD

Halifax Modellers World , 29 Union Street, Halifax, HX1 1PR

ALL MODELS.ALL MAKES.ALL SCALES.

OPENING HOURS: MON, TUES, THUR 10.30-17.30, WED CLOSED, FRI 10.30-17.00,SAT 9.30-17.00,SUN 10.30-16.30

www.halifaxmodellersworld.co.uk

Email:halifaxmodellersworld@fsmail.net

### HANNANTS MODEL SHOP

Tel: 0208 205 6697 Fax: 01502 500521

Unit 2, Hurricane Trading Estate, Grahame Park Way, Colindale, NW9 5QW

OPEN 10.00AM - 5.30PM, THURS & FRI OPEN UNTIL 7.00PM

NO1 IN EUROPE FOR PLASTIC KITS AND ACCESSORIES INCLUDING THE FULL RANGE OF TAMIYA (NOT RC)

email: sales@hannants.co.uk www.hannants.co.uk 1/2 MILE FROM RAF MUSEUM MASTERCARD/VISA/SWITCH

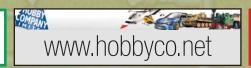
## **ADVERTISE ON THIS PAGE!**

IF YOU ARE READING THIS THEN SO ARE THOUSANDS OF OTHERS. FOR INFORMATION, **CALL GARETH LIDDIATT** ON 01525 222573

## 

eduard

eduard.com





italeri.com

creativemodels.co.uk



tamiya.com



revell.com

adhbooks.com









missing-lynx.com www.missing-lynx.com



www.hyperscale.com

## *l*er miss an issue

**Subscribe now and get the next 12 issues delivered** before before they hit the shops













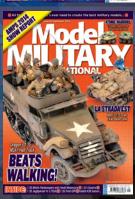












Order subscriptions direct! - Order on-line at www.modelmilitary.com

ORDER FORM - MMI
First name
Surname
Address
Post/zip code
Country
Telephone Number

DI 112 12 16 6
Please debit my credit/debit card for £
Visa Mastercard Maestro Other
Card number
CCV security code (three numbers on signature strip)
Valid from Expiry date
Issue number (if applicable)
Please mail this form to; ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfo

Subscriptions per year:-UK; £44, Europe; £56, World-wide; £69 Cheques payable to: ADH Publishing Ltd. Renewal / Starting with issue No. Signature

ordshire, LU6 1QX, United Kingdom **Tel**; +44(0)1525 222573 **Fax**; +44(0)1525 (Photocopies of this form are acceptable)



## i Contact Details - for companies featured in MMI...

#### **ACCURATE ARMOUR/ ARMOUR DISTRIBUTION**

Units I5-I6 Kingston Industrial Estate, Port Glasgow, Inverciyde, PAI4 5DG Scotland. Tel; 01475 743 955 Fax; 01475 743746 www.accurate-armour.com

#### **ADALBERTUS**

Iberyjska 7/49, 02-764, Warsaw, Poland adalbertus@adalbertus.com.pl www.adalbertus.com.pl

#### **THE AIRBRUSH COMPANY Ltd**

Unit 7 Marlborough Road, Lancing Business Park, Lancing, West Sussex, BNI5 8UF. Tel; 08700 660 445

#### **ALCLAD II LACQUER**

5 St Georges Close, Bacton, Norfolk. NRI2 OLL Tel; 01962 65216 Fax: 01692 652334

#### ALPINE, ROYAL MODEL, ARTISAN MORI, YOSCI; SMARTMODELLING

No.7 Gordons Way, Oxted, Surrey RH8 OLN. UK Tel: 01883 734746

smartmodelling@smart7.fsworld.co.uk

#### AMPERSAND PUBLISHING

(via Historex Agents in UK) 235 NE 6th Avenue #4 Delray Beach, Florida 33483-5543, USA Tel: 561-266 9686

#### **ARCHER**

(Historex in UK)
PO Box 1277 Youngsville, NC 27596-1277, USA

#### **BADGER AIR-BRUSH COMPANY**

9128W Belmont Ave, Franklin Park, IL 60131 Tel; 847/678-3104 www.badgerairbrush.com email info@badgerairbrush.com (In the UK from www.shesto.co.uk)

#### **BISON DECALS**

Available from www.hannants.co.uk and

#### **BLAST MODELS**

Via AFV Modeller or www.blast-models.com

#### **BOOKWORLD WHOLESALE**

Unit 10 Hodfar Road, Sandy Lane Ind Est Stourport, Worcs, DYI3 9QB Tel: 01299 823330 info@hookworldws.co.uk

#### **CALIBRE 35**

Via Hannants in UK

#### CAMMETT

(Lifecolour, Scale Caliber)

Unit 5 Greenfield Industrial Estate Forest Road, Hay on Wye, Powys, HR3 5FA Tel: 01497 822757 Email; cammettco@btinternet.com

www.cammett.co.uk

#### **CLASSIC PUBLICATIONS**

Midland Counties Publications, 4 Watling Drive. Sketchley Lane Industrial Estate, Hinckley, Leics UK, LEIO IYF Tel; 01455 233 747, Fax: 01455 233 737 midlandbooks@compuserve.com www.classic-publications.com

#### **CREATIVE MODELS LTD**

(Mig Productions, Vallejo, Accurate Miniatures)
Unit 6-10, Honeysome Industrial Estate, Honeysome
Road, Chatteris, Cambridgeshire. PEI6 6TG Tel: 01354 760022 www.creativemodels.co.uk

info@creativemodels.co.uk

#### **DARTMOOR MILITARY MODELS**

Haylis cottage, Budlake, Broadclyst Exeter, EX5 3LJ, England Tel: 01392 881271 v.dartmoormilitarymodels.com

#### **DELUXE MATERIALS**

www.deluxematerials.co.ul info@deluxematerials.com Tel: 01529 455 0340

#### **DRAGON MODELS**

(The Hobby Company in UK)
Dragon Models Ltd, Kong Nam Ind. Building BI-IOF,
603-609 Castle Peak Road, Tsuen Wan NT, Hong Kong Fax; (HK) 4110587 www.dragonmodelsltd.com (For I:6 Action Figures, please contact Amerang in UK)

#### **ECHELON FINE DETAILS**

Available from; www.accurate-armour.com & http://pachomel.pacific.net.sg/~kriegsketten/

#### **FRIENDSHIP MODELS**

12 Delta Drive, Musselburgh, East Lothian, EH2I 8HR Tel; 013I 665 0866 Mobile; 07877166225 www.friendshipmodels.com

#### **GREAT NORTH ROADS**

9a Marcombe Road, Torquay, South Devon, TQ2 6LL Tel; 01803 400436 www.greatnorthroads.co.uk email svfarrugia@yahoo.co.uk

#### **HANNANTS**

Harbour Road, Oulton Broad Lowestoft, Suffolk, NR32 2LZ, Tel; 01502 517444 Fax; 01502 500521 www.hannants.co.uk sales@hannants.co.uk

#### **HISTOREX AGENTS**

Wellington House, 157 Snargate Street, Dover, Kent, CTI7 9BZ, UK Tel: 01304 206720 www.historex-agents.co.uk sales@historex-agents.co.uk

#### **HOBBYLINK JAPAN**

Sano-shi, Kurohakama-cho 162-I, Tochigi 327-0813, Japan

#### **HUSSAR PRODUCTIONS, CANADA**

w.airconnection.on.ca

#### IAN ALLAN

www.ianallanpublishing.com Mail Order Dept 01455 254450

Kiev 02099, Ukraine, Borispolskaya 9 building 64. Tel/fax; (+38044) 369-54-12 export@icm.com.ua www.icm.com.ua

#### **ITALERI**

(The Hobby Company in UK)
Via Pradazzo, 6, I-400I2 Calderara Di Reno, Bologna, Italy, Tel; 05I 726037

#### **JUST BASES**

21 Graham Road, Paignton TQ3 IBB Tel; 01803 558520

4 High Street, Botley, Southampton, SO30 2EA Tel; 0I489 78II77 w.iustkitsandmodels.co.uk

LSA MODELS (TASCA, MASTER BOX) Retail; I5I Sackville Road, Hove, East Sussex, BN3 3HD, England. Tel/Fax; 01273 705420 orders@lsamodels.co.uk

Model Design Construction, Victoria Place, Victoria Road, Ripley, Derbyshire DE5 3FW Fax: 01773 513344 orders@modeldesignconstruction.com www.modeldesignconstruction.com

#### **MODELING ARTISAN MORI**

http://www3.ocn.ne.ip/~m.a.mori/index\_eng.html

#### **MIG PRODUCTIONS**

(Creative Models in UK)
C/ Santiago Rusinol 7, Pral 2a,
08750 Molins de Rei, Barcelona, Spain w.migproductions.com

#### **MILICAST MODEL CO.,**

9 Rannoch St., Battlefield, Glasgow G44 4DF, Scotland Tel/Fax; 014I 633 I400 milicastmodels@hotmail.com www.milicast.com

#### (ETCHMATE, GRABHANDLER, MICRO CHISEL)

www.etchmate.com w.missionmodels.com Tel; 818 842 1885 Fax; 818 842 1886 info@missionmodels.com. sales@missionmodels.com, orders@missionmodels.com

#### THE ARMORY: M&MODELS

9329 S. Cicero Ave, Oak Lawn, IL 60453, USA http://home.earthlink.net/~mmodels/

#### **MODEL WHOLESALE UK LTD**

Tel: 01892 533036 w.modelwholesaleuk.com

### **MONROE PERDU**

Monroe Perdu Designs, 3168 Renee Court, Simi Valley, CA 93065, USA.

#### **ORDNANCE MODELS**

Via: www.steelmodels.com

#### **PACIFIC COAST MODELS**

Tel; 00I 707 538 4850 info@pacmodels.com www.pacmodels.com

#### **PANZERWRECKS**

PO Box 164, Heathfield, Sussex TN2I 8WA, UK www.panzerwrecks.com

#### **PLUS MODEL**

(Creative Models in UK)

Jizni 56, 370 IO C. Budejovice, Czech Republic. plusmodel@plusmodel.cz www.plusmodel.cz

#### **POCKETBOND LTD**

(Trumpeter & AFV Club in UK) PO Box 80, Welwyn, Hertfordshire,

England, AL6 OND Tel; 01707 391509 Fax: 01707 327 466 info@pocketbond.co.uk

#### **PSP MODELS LTD**

(Mission Models in USA) Unit 19B, Applin's Farm, Farrington,

Dorset DTII 8RA, UK Tel/Fax: 01747 811 817

#### QUICKBOOST

#### **REVELL GmbH & Co. KG**

Orchard Mews, I8C High Street, Tring, Herts, HP23 5AH Tel: +44 (f) 1442 890285

UK distributor for Model Victoria and Royal Model P.O. Box II4, Barrow-in-Furness, Cumbria, LAI3 OWY. Tel/Fax; 01229 430 749 sales@sbmodels.fsnet.co.uk www.sbmodels.net

PO Box 794, Cheltenham GI 52 37W, LIK RICHARDSBLC@aol.com

#### **SBX MODEL SHOP**

Norwich Road, Ipswich. IPI 5DN Tel; 01473 464311 www.sbxmodelshop.co.uk

SCHATTON BARRELS Industriestrasse 6, 94347 Ascha, Germany Fax: 0996I 9I0 7826

SCHIFFER BOOKS Schiffer Publishing, 4880 Lower Valley Rd, Atglen, PA, 19310 USA www.schifferbooks.com

#### SCHIFFER BOOKS in UK

Bushwood Books, No.6 Marksbury Avenue, Kew Gardens, Surrey TW9 4JF, UK. Tel; 020 8392 8585, 020 8392 9876, email: info@bushwodbooks.co.uk

#### **SCHUMO KITS**

www.schumn-kits.com

#### SDV MODEL

www.sdvmodel.cz

#### SIMPLE 2 TRADE

No 2 Hollywood Lane, Hollywood, Birmingham, B47 5PP Tel; 0121 474 3030 www.simple2trade.com

#### SMARTMODELLING

(Swash, Tasca, Gap, Yosci, Royal Model) No.7 Gordons Way, Oxted, Surrey RH8 OLN UK Tel: 01883 734746 smartmodelling@smart7.fsworld.co.uk

III5 Crowley Drive, Carrollton, TX 75006-I3I2 U.S.A

#### **SWANN-MORTON**

Owlerton Green, Sheffield, S6 2BJ Tel; +44 (0)114 234 4231 Fax: +44 (0)114 231 4966 General: info@swann-morton.com www.craftknives.com

#### TAMIYA JAPAN

Tamiya, Inc., 3-7 Ondawara Suruga-ku, Shizuoka 422-8610 JAPAN www.tamiva.com

#### TAMIYA UK:

THE HOBBY COMPANY LIMITED Garforth Place, Knowlhill, Milton Keynes, MK5 8PG, UK Tel; 01908 605686 Fax; 01908 605666 enquiries@hobbyco.net www.hobbyco.ne

#### **TRUMPETER**

Pocketbond in the UK

#### **VERLINDEN PRODUCTIONS**

(Historex in UK)

811 Lone Star Drive, O'Fallon, Missouri 63366, USA www.verlinden-productions.com

(Creative Models in UK) Acrylicos Vallejo, SL Apartado 337 - 08800 Vilanova i la Geltrú, Barcelona, Spain Tel: (34) 93 893 60 12 Fax; (34) 93 893 II 54 www.acrylicosyalleio.com

#### **VLS CORPORATION**

(TRAKZ, WINGZ, CUSTOM DIORAMICS, WARRIORS): Lincoln County Industrial Park, IOII Industrial Court. Moscow Mills, Missouri 63362, USA www.modelmecca.com

#### **WHITE ENSIGN**

Unit 5, Cobnash Industrial Estate, HR6 9RW Tel; 0844 415 0914 wem@onetel.com www.whiteensignmodels.com

**WWII PRODUCTIONS, AUSTRALIA** 12 Prince Street, Waratah, 2298, NSW, Australia Tel; +6I (0)2 4967 3205 Fax; +6I (0)2 4967 3207 ww2prod@optusnet.com.au

(The Hobby Company in UK)
Promishlennaia Str.,2, Lobnya, Moscow Region, 141730 Russia office@zvezda.org.ru www.zvezda.org.ru

## **Next Issue** On sale 2nd October, 2014



**OMAHA BEACH** 

Jose Brito presents a dramatic 1:35 scale diorama.



## **GREAT WHITE NORTH SHOW REPORT**

Scott Taylor covers the 2014 Great White North model show in words and pictures.



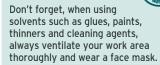
## **HE GOT LEGS!**

Matt Wellhouser builds and paints Bonehead Models' large scale SS Squad Leader

## and much more!

Due to many influencing factors, we cannot guarantee the appearance of the above projects, but we'll try our best!

#### **FOR YOUR SAFETY**



When using power tools, side cutters or any tool that can suddenly break or create highspeed airborne particles, wear approved eve protectors with hard, clear lenses. Please always model in safety!



#### ISSUE No.102 October 2014. Published September 4th 2014

Editor: Brett Green Group Editor: Marcus Nicholls Publisher; Alan Harman Graphic Design: Alex Hall Advertising Sales; Gareth Liddiatt Advertising Assistant; Joe Brown Office Manager: Paula Grav Administration Manager; Hannah McLaurie MMI Website: ADH Web Team

Printed by;

Symbian Print Intelligence, Hertfordshire, UK

#### Distributed by;

Seymour Distribution 2 East Poultry Avenue, London, EC1A 9PT Tel; 020 7429 4000

#### Newstrade;

Select Publisher Services 3 East Avenue, Bournemouth, BH3 7BW Tel: 01202 586848 Email; tim@selectps.com

Model Military International is published on the first Thursday of each month by; ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX UK www.modelmilitary.com Tel; +44 (0)1525 222573 Fax; +44 (0)1525 222574

#### Editorial enquiries;

Email; editor@modelmilitary.com

#### Advertising enquiries; Tel; +44 (0)1525 222573

Email: gareth@adhpublishing.com

### Subscription enquiries; Tel; +44 (0)1525 222573

Fax; +44 (0)1525 222574 Email; enquiries@adhpublishing.com

Reproduction in part of any text, photograph, or illustration without written consent from the publisher is strictly prohibited. While due care is taken to ensure the contents of Model Military International is accurate, the publishers and printers can not accept responsibility for errors and omissions.

Advertisements are accepted for publication in Model Military International only on ADH Publishing's standard terms of acceptance of advertising, copies of which are available from the advertising department. Please write to the address above. All advertising, circulation and subscription enquiries should also be directed to the UK address above.

#### Subscription rates are;

1 year (12 issues); £44 UK £56 Europe £69 Worldwide (Airmail)

#### Binders;

£8.50 plus postage (UK £2.45, Euro £4.45, World £6.45) For all orders, please call; (UK) +44(0)1525 222573 or visit www.modelmilitary.com

Back Issues are available at the current cover price. See the latest back issues advert or visit www.modelmilitary.com

The paper used in this magazine is manufactured at the Leipa Georg Mill and is 100% recycled using de-inked pulp. The mill conforms fully with the requirements of both FSC and PEFC and carries the full accreditations



The paper used on this title is from sustainable forestry



# TWENTY FOUR LES



hen this kit arrived at Tetley Towers for review my first thought was that there isn't a lot to go with it.
Then I remembered my 1:24 scale
Bandai kits in the loft (King Tiger, Panther &
Jagdpanther), plus the ancient Tamiya 1:25 kits that are back on re-release, and finally Tasca's Panzer II. Then I realised that car modellers have 1:24 as standard so, upon reflection, this scale makes a lot of sense.

Not so long ago I built the 1:35 version of this kit so it is good to compare and see what the difference in scale makes. So what do we get?

This kit arrives in a very sturdy box and the company blub tells us that there are 258 parts to this model. It is generally cleanly moulded with a few bits of visible flash, but no imperfections. Unlike the 1:35 kit, the chassis comes in one piece with the chassis rails, fenders and running boards all moulded integrally. The 1:35 kit was a rather complicated in this area so it is pleasing to see a one-piece item. In fact this incarnation not a scaled up version of the smaller kit at all.

Moulded on nine sprues, we have soft rubber tyres, clear parts for the windscreen and two chromed sprues containing items such as the bumpers, radiator grille, headlights and pennant holders. For me, chromed parts just do not work as you have to clean up the sprue attachment points and then the mould separation lines.

Detail throughout is good but a little simplified in places. In typical ICM style the doors are moulded integrally with the body and, whilst you could score them off, it will be a delicate job. I also noticed that the pistol holster molded onto the door inner part is very clunky.

The instructions are nice and clear and, to finish it off, we have a decal sheet giving us four marking options.

#### CONSTRUCTION

We start off with the engine which is built from 15 parts. In this scale there are plenty of detailing possibilities and it will benefit from wiring etc. The tyres have a somewhat unusual tread pattern (it differs from the box art) and are dressed with chromed hubcaps.

As noted above, the chassis is superbly moulded and acts as a nice, clean, base for the suspension units. The front wheels are not positionable and the rear axle is constructed

# Graham Tetley compares ICM's new 1:24 scale G4 Personnel Car with the 1:35 scale version that he built recently.

just as per its 1:35 counterpart. There are some prominent seam lines to clean up, but the size of the parts makes the fit that little bit easier.

The interior very simple, made easier by the doors all been moulded solid. You could separate them from the body, but that would be a chore and leave you with detail to replicate. I guess that this keeps the kit costs down, but individual door mouldings would be nice to have.

To show off the engine, ICM indicate in Step 26 that you can cut and fold the bonnet (hood). The only problem is that we have no fold lines moulded into the bonnet part to help us. Also, in this step, it becomes obvious that the kit is missing a radiator. The front grille part E7 is hollow, so this is quite a large omission that is not easily rectified.

To finish off the car we have a closed cover, but you can assemble it open if required as the parts are in the box, just shown as not for use.

To round off, I must comment on the chromed parts. Chrome is virtually impossible to pull off in plastic and, whilst a good idea in practice, you will ruin the chrome finish, both in removing all the parts from the sprue, and then cleaning up the mould lines.

This is a welcome addition to the 1:24 world, and, on first impressions, quite impressive in many areas. The kit is let down by some detail being very clunky and toy-like, plus the missing radiator part really is noticeable once you realise that it isn't there. The chrome is best removed and I feel that ICM would have been better leaving these sprues in bare plastic.

That said, if you love a super detailing project then this will keep you busy for weeks. It is a unique kit that no-one else does in this scale, plus it is very reasonably priced, and for those reasons it gets a 7/10 from me.



Decals.

Thanks to ICM for the sample www.icm.com.ua



Strange tyre detail.



Beautiful one-piece chassis



Nice but a hit clunk



Chrome my grille baby



Chrome bits



More chrome bits.



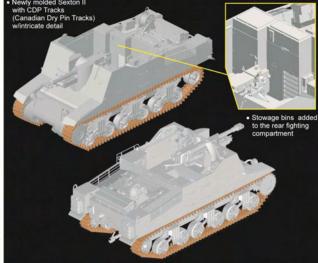
Bonnet detail.



Dashboard ready for the dials.

## TON II with CDP TRACKS (Canadian Dry Pin Tracks)









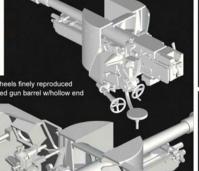




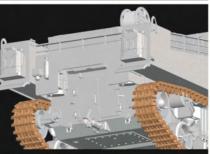








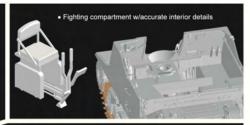


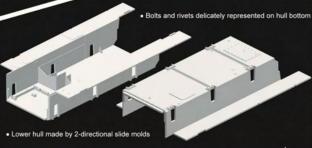




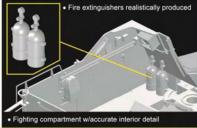












D6793







## Changing the Face of Warfare

1/35 Motorized Tank Series WWI British Tank Mk.IV Male (Item 30057)

### 100 years on from the outbreak of the Great War, Tamiya releases its maiden WWI tank model

The Mk.IV, the world's first mass-produced tank, makes a much-anticipated appearance in 1/35 scale and becomes Tamiya's first WWI tank model. Extensive study of a surviving example at the Tank Museum in Bovington, U.K. allowed Tamiya designers to unerringly capture the rhomboid form of the Mk.IV, highlighted by the model's depiction of the riveted armor panels. A pre-assembled single motor gearbox also lets you recreate the forward motion of the real tank. Take this opportunity to examine the roots of the modern day tank with this masterful model of the Mk.IV, which proved the viability of the tank as a weapon in its deployment at the Battle of Cambrai in 1917.



Power is supplied from the gearbox via multiple gears to the durable metal rear sprockets, realizing powerful motion. Kit includes choice of ★Requires one R6/AA/UM3 battery (not included). marking options Unditching log features metal 6-pounder gun 6-pounder's breech is fully recreated in the sponson interior. 7.62mm Lewis gun



Select open or closed visor flaps and upper hatch. Lewis machine gun parts are movable.

Moving link-type tracks encircle the hull



**WWI British** 

Infantry Set (35339)

«About the Mk.IV» A century ago, the world was about to be thrust into the grip of a war which would see much of Western Europe reduced to a massive battlefield criss-crossed by a seemingly unending network of trenches. The original British Mk.I tank was developed to break the deadlock, the name 'tank' originally used to disguise the true purpose of the vehicle from enemy intelligence, passing it off as a simple water tank. It stuck, however, and continues to be used even in the present day. The Mk.IV was an improved variant of the original design,

and with over 1,000 units produced was the first major production variant of a rhomboid tank. The Male variant was developed to smash through enemy lines and in addition to machine guns it utilized large 6-pounder guns, in contrast to the separate Female variant equipped with only machine guns for armament. The Mk.IV saw a variety of action, including a mass deployment of around 400 at the Battle of Cambrai in November 1917, additionally prevailing in the world's first tank on tank battle with the German A7V in April 1918.